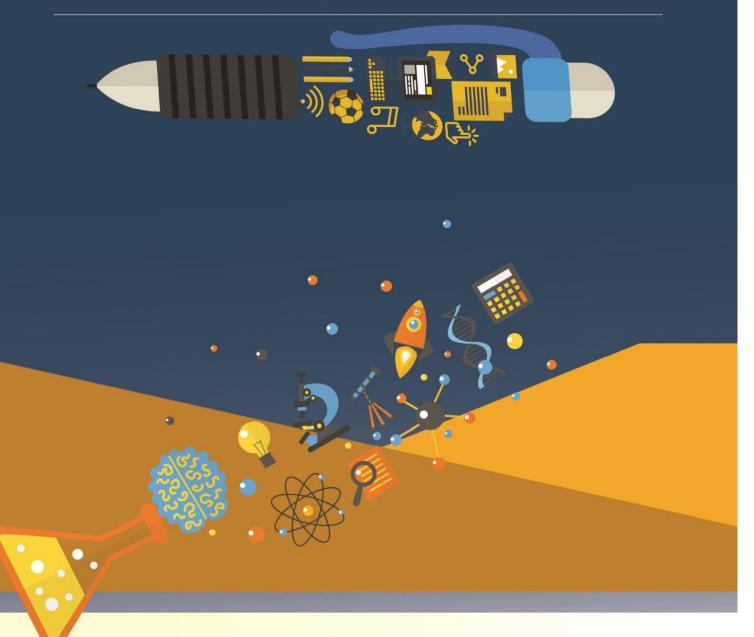






# SECONDARY SCHOOL CURRICULUM 2024-25



## **CENTRAL BOARD OF SECONDARY EDUCATION**

Academic Unit, Shiksha Sadan, 17, Rouse Avenue, New Delhi-110 002

Secondary School Curriculum 2024-25

Class IX-X

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## THE CONSTITUTION OF INDIA

#### **PREAMBLE**

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a '[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC] and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

**FRATERNITY** assuring the dignity of the individual and the<sup>2</sup> [unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

- 1. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
- 2. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "unity of the Nation" (w.e.f. 3.1.1977)

#### THE CONSTITUTION OF INDIA

#### Chapter IV A

#### **FUNDAMENTAL DUTIES**

#### **ARTICLE 51A**

Fundamental Duties - It shall be the duty of every citizen of India-

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;
- <sup>1</sup>(k) who is a parent or guardian to provide opportunities for education to his/her child or, as the case may be, ward between age of six and forteen years.
- $1. \quad Ins.\ by\ the\ constitution\ (Eighty-SixthAmendment)\ Act, 2002\ S.4\ (w.e.f.\ 12.12.2002)$

## भारत का संविधान

## उद्देशिका

हम, भारत के लोग, भारत को एक सम्पूर्ण 'प्रभुत्व-संपन्न समाजवादी पंथनिरपेक्ष लोकतंत्रात्मक गणराज्य बनाने के लिए, तथा उसके समस्त नागरिकों को:

> सामाजिक, आर्थिक और राजनैतिक न्याय, विचार, अभिव्यक्ति, विश्वास, धर्म

> > और उपासना की स्वतंत्रता, प्रतिष्ठा और अवसर की समता

प्राप्त कराने के लिए <sup>2</sup> तथा उन सब में व्यक्ति की गरिमा

> 'और राष्ट्र की एकता और अखंडता सुनिश्चित करने वाली बंधुता बढ़ाने के लिए

दृढ़संकल्प होकर अपनी इस संविधान सभा में आज तारीख 26 नवम्बर, 1949 ई॰ को एतद्द्वारा इस संविधान को अंगीकृत, अधिनियमित और आत्मार्पित करते हैं।

- 1. संविधान ( बयालीसवां संशोधन ) अधिनियम, 1976 की धारा 2 द्वारा ( 3,1.1977 ) से "प्रभुत्व-संपन्न लोकतंत्रात्मक गणराज्य" के स्थान पर प्रतिस्थापित।
- 2. संविधान ( बयालीसवां संशोधन ) अधिनियम, 1976 की धारा 2 द्वारा ( 3.1.1977 ) से "राष्ट्र की एकता" के स्थान पर प्रतिस्थापित।

#### भाग 4 क

## मूल कर्तव्य

51 क. मूल कर्तव्य - भारत के प्रत्येक नागरिक का यह कर्तव्य होगा कि वह -

- (क) संविधान का पालन करे और उसके आदशों, संस्थाओं, राष्ट्रध्वज और राष्ट्रगान का आदर करे;
- (ख) स्वतंत्रता के लिए हमारे राष्ट्रीय आंदोलन को प्रेरित करने वाले उच्च आदर्शों को हृदय में संजोए रखे और उनका पालन करे;
- (ग) भारत की प्रभुता, एकता और अखंडता की रक्षा करे और उसे अक्षुण्ण रखे;
- (घ) देश की रक्षा करे और आह्वान किए जाने पर राष्ट्र की सेवा करे;
- (ङ) भारत के सभी लोगों में समरसता और समान भ्रातृत्व की भावना का निर्माण करे जो धर्म, भाषा और प्रदेश या वर्ग पर आधारित सभी भेदभाव से परे हों, ऐसी प्रथाओं का त्याग करे जो स्त्रियों के सम्मान के विरुद्ध हैं;
- (च) हमारी सामासिक संस्कृति की गौरवशाली परंपरा का महत्त्व समझे और उसका परिरक्षण करे;
- (छ) प्राकृतिक पर्यावरण की जिसके अंतर्गत वन, झील, नदी, और वन्य जीव हैं, रक्षा करे और उसका संवर्धन करे तथा प्राणी मात्र के प्रति दयाभाव रखे:
- (ज) वैज्ञानिक दृष्टिकोण, मानववाद और ज्ञानार्जन तथा सुधार की भावना का विकास करे;
- (झ) सार्वजनिक संपत्ति को सुरक्षित रखे और हिंसा से दूर रहे;
- (ञ) व्यक्तिगत और सामूहिक गतिविधियों के सभी क्षेत्रों में उत्कर्ष की ओर बढ़ने का सतत प्रयास करे जिससे राष्ट्र निरंतर बढ़ते हुए प्रयत्न और उपलब्धि की नई उंचाइयों को छू ले;
- '(ट) यदि माता-पिता या संरक्षक है, छह वर्ष से चौदह वर्ष तक की आयु वाले अपने, यथास्थिति, बालक या प्रतिपाल्य के लिये शिक्षा के अवसर प्रदान करे।
- 1. संविधान ( छयासीवां संशोधन ) अधिनियम, 2002 की धारा 4 द्वारा प्रतिस्थापित।

#### 1. PRINCIPLES OF THE CBSE CURRICULUM

#### 1.1 CBSE Curriculum

The curriculum in broad term reflects nation's shared vision of education encompassing local, national and global needs and expectations. Empirically, it may be regarded as the sum total of a planned set of educational experiences provided to a learner by a school to attain stipulated competencies using specified content, pedagogical practices and assessment guidelines etc. CBSE's curriculum strives to provide opportunities for students to achieve excellence in learning as envisioned in the National Education Policy-2020.

#### 1.2 Salient Features of the CBSE Secondary School Curriculum

The Curriculum prescribed by CBSE strives to:

- i. provide ample scope for holistic i.e., physical, intellectual and social development of students;
- ii. emphasize constructivist rather than rote learning by highlighting the importance of handson experience;
- iii. enlist general and specific teaching and assessment objectives to make learning competencybased and attain mastery over laid down competencies;
- iv. encourage the application of knowledge and skills in real-life problem-solving scenarios;
- v. uphold the 'Constitutional Values' by encouraging values-based learning activities;
- vi. promote 21st Century Skills, Life Skills, Financial Literacy, Digital Literacy, Health and Wellness, Road Safety, Citizenship Education, Disaster Management and multilingualism;
- vii. integrate innovations in pedagogy such as experiential, activity centered, joyful learning, Sport & Art-Integrated Learning, toy-based pedagogy, storytelling, gamification etc. with technological innovations (ICT integration) to keep pace with the global trends in various disciplines;
- viii. promote inclusive practices as an overriding consideration in all educational activities;
- ix. enhance and support learning by different types of assessments; and
- x. strengthen knowledge and attitude related to livelihood skills;
- xi. foster multilingual and multicultural learning and national understanding in an interdependent society;
- xii. integrate environmental education in various disciplines from classes I- XII.

#### 1.3 Curriculum Areas at Secondary Level

CBSE envisions the all-round development of students in consonance with the holistic approach to education and, therefore, has done away with artificial boundaries between the co-curricular and the curricular domains.

Secondary Curriculum provides students with a broad and balanced understanding of subjects including languages, Mathematics, Science, and Social Science to enable students to communicate effectively, analyse and interpret information meaningfully, make informed decisions, construct their worldview in alignment with constitutional values, and progress smoothly to be productive future citizens. The recent focus of CBSE is on developing 21st-century skills in settings where each student feels independent, safe, and comfortable with learning. The Board hopes that schools will try to align the curriculum in a way children feel more connected to it and employ their learning in real-life contexts. To achieve this aim, it is essential that children acquire adequate knowledge and skills in other core areas like Health and Physical Education, Life Skills, Values Education, Art Education, Financial Literacy, Digital Literacy, and Work Education.

In an operational sense, the secondary curriculum is learner-centered with school being a place where students would be acquiring various skills; building self-concept, a sense of enterprise, aesthetic sensibilities, and sportsmanship. Therefore, for the purpose of fostering core competencies in learners, this curriculum encompasses major learning areas as under:

S. No.	Subject	Nature			
1	Languages 1				
2	Languages 2				
3	Social Science	Compulsory			
4	Mathematics				
5	Science				
6	Skill based Subject/ Elective Subject	Optional			
7	Language 3	Optional			
8	Health and Physical Education	Compulsory Subjects having only			
9	Work Experience	school based internal assessment			
10	Art Education				

#### i. Languages

Languages include Hindi, English and 38 other languages. The curricula in languages focus on listening, speaking, reading and writing skills and, hence, develop effective proficiencies in all these areas. Learners use language to comprehend, acquire and communicate ideas in an effective manner. CBSE also encourage schools to provide a multilingual and multicultural experiences to promote national integration.

#### ii. Social Science

Social Science (Geography, History, Economics and Political Science) intends to make learners understand how people behave, interact and influence the world within their cultural, geographical and historical milieus and gain in-depth knowledge, attitude, skills and values necessary to bring about transformation for a better world. It aims to develop the ability to analyse complex social, political, historical, economic and environmental issues, think critically, assess different solutions, understand different perspectives, and effectively communicate information. Social Science includes the learning of history and culture, geographical environment, global institutions, constitutional values and norms, politics, economy, interpersonal and societal interactions, civic responsibilities and the incorporation of the above-mentioned learning. Learners appreciate and value everyone's right to feel respected and safe, and, also understand their Fundamental Rights and Duties and behave responsibly in the society.

#### iii. Science

Science: (Biology, Chemistry and Physics) seeks to explain the rules that govern the natural phenomenon through scientific methods. The focus is on knowledge and skills to develop a scientific temper and to use and apply scientific knowledge for improving the quality of life. The Curriculum promotes the ability to engage with science related issues, and with the ideas of science, as a reflective citizen by being able to explain phenomena scientifically, evaluate and design scientific enquiry, and interpret data and evidence scientifically.

Students understand the importance of to apply scientific knowledge in the context of reallife situations and gain competencies that enable them to participate effectively and productively in life.

#### iv. Mathematics

Mathematics is the abstract science of number, quantity, and space, either as abstract concepts, or as applied to other disciplines such as sciences, technology and engineering. Mathematics includes acquiring the concepts related to number sense, operation sense, computation, measurement, geometry, probability and statistics, the skill to calculate and

organize, the ability to apply this Knowledge and acquired skills in their daily life and the skills to think mathematically. It also includes understanding of the principles of reasoning and problem solving. Children learn to rationalize and reason about pre-defined arrangements, norms and relationships in order to comprehend, decode, validate and develop relevant patterns Mathematics is offered at two different levels i.e. Mathematics (Basic) & Mathematics Standard to suit needs of different learners.

#### v. Skill Electives

According to the National Education Policy 2020 aims to overcome the social status hierarchy associated with vocational education and integration of vocational education into mainstream education in all educational institutions in a phased manner. Beginning with vocational exposure at early ages in middle and secondary school, CBSE has started quality vocational education through 12-hour modules for classes VI-VIII. In secondary classes Board offers variety of competency-based subjects under NSQF like Retail, Information Technology, Marketing & Sales, Banking, Finance, AI etc. Choosing any one Skill subject at secondary level can helps the child to pursue what truly interests or pleases him or her. This liberty promotes a sense of self-esteem in accepting one's own talents and strengths.

CBSE is actively facilitating the Skill Hubs initiatives in its schools and also looking forward to operationalise National Credit Framework (NCrF) to enable the integration of academic and vocational domains to ensure flexibility and mobility between the two.

The curriculum and the study material for the Skill Electives is available on the CBSE academic website under the tab 'Skill Education' and can be accessed through the link: http://cbseacademic.nic.in/skilleducation. html.

#### vi. Art Education

It entails instruction in various art forms (visual as well as performing) with an aim to help children develop an interest for arts and encourage them to enthusiastically participate in related activities, thus, promoting abilities such as imagination, creativity, valuing arts and cultural heritage. In addition, Arts should be integrated with other subjects to promote creative thinking and expression

#### vii. Health and Physical Education

It focuses on holistic development, both mental and physical, understanding the importance of physical fitness, health, wellbeing and the factors that contribute to them. Focus of this area is on helping children develop a positive attitude and commitment to lifelong, healthy active living and the capacity to live satisfying, productive lives with the help of health management, indigenous sports, Yoga, NCC, self-defence, fitness and life style choices.3

#### viii. Work Experience

The Work Experience has been subsumed in the Health and Physical Education; however, it is an integral part of the curriculum and is given as much as focus as Health and Physical Education.

#### 1.4 Integrating All Areas of Learning:

All these eight areas are to be integrated with each other in terms of knowledge, skills (life and livelihood), comprehension, values and attitudes. Children should get opportunities to think laterally, critically, identify opportunities, challenge their potential and be open to new ideas. Children should be engaged in practices that promote physical, cognitive, emotional and social development and wellbeing, connect different areas of knowledge, application and values with their own lives and the world around them. The holistic nature of human learning and knowledge should be brought forth while transacting the curriculum to make them good citizens who can contribute in making the world a happy place.

#### 2. IMPLEMENTATION OF CURRICULUM

#### 2.1 School Curriculum Committee

The Board mandates that all schools must setup a School Curriculum Committee comprising teachers from each area. The School Curriculum Committee would define activities for pedagogical practices, evolve a plan of assessment and mechanism of feedback and reflection and ensure its implementation. The committee would also ensure that the textbooks/ reference materials are age appropriate, incorporate inclusive principles, gender sensitive, have valid content and do not contain any material which may hurt the sentiments of any community. The committee will then send the list of books to the principal to take action as per para 2.4.7 (b) of the Affiliation Byelaws, 2018. The committee would also ensure that the reference materials reflect conformity with the underlying principles of the Constitution of India and are compliant with NEP-2020. Issues of gender, social, cultural and regional disparities must be taken care of in the curriculum transaction.

#### 2.2 Pedagogical Leadership

All Principals have a crucial role to play in the evolution of the teaching learning ecosystem as the Head and pedagogical leader of their schools. In the role of school pedagogical leader, the principal is expected to undertake the following:

- Lead, Guide and Support the teaching and learning processes in the school by focusing on classroom specific requirements for transacting the curriculum, so that both teachers and students perform at their optimal best.
- ii. Direct the entire focus of all school activities towards the students' learning and acquiring of necessary competencies. Every activity taken up by the school, therefore, should be mapped for the educational competencies, and for life skills, values, etc., being acquired by the students.
- iii. Prepare Annual Pedagogical Plan of the school by designing and developing annual plan for the school by giving equal importance to all areas.
- iv. Promote innovative pedagogy, with special focus on integrating art, sports and ICT (Information and Communication Technology) with education, and use of active and experiential learning methods in the classrooms.
- v. Ensure joyful learning at all levels through use of such innovative pedagogy.
- vi. Develop school specific resources for teaching and learning, in the form of lesson plans, econtent, use of mathematics and science kits developed by NCERT, etc.
- vii. Ensure proper in-house training of teachers in the school to enable them to unleash their own unique capabilities and creativity in their classrooms.
- viii. To be up to date with all new ideas and tools, etc. being used in education at the global level and constantly innovate the pedagogy of the school.
- ix. To make efforts to learn from the best practices of other schools, by arranging for discussions with Principals of such schools, or through observation visits of teachers to other schools.

The Board has not laid down the structure or format of the annual pedagogical plan as the Board respects educational autonomy of every school and expects each school to prepare its own unique and innovative annual plan. This plan must be an implementable one with realistic timelines that should include administrative inputs and detailed pedagogical aspects.

#### 2.3 Pedagogical Practices by Teachers

The pedagogical practices should be learner centric. Teachers are expected to ensure such an atmosphere for students where they feel free to ask questions. They would promote active learning among students with a focus on reflections, connecting with the world around them, creating and constructing knowledge. The role of a teacher should be that of a facilitator who would encourage collaborative learning and development of multiple skills through the generous use of resources via diverse approaches for transacting the curriculum.

Teachers should follow inclusive principles and not label children as 'slow learners' or 'bright students', or 'problem children'. They should instead attend to the individual difference of students by diagnosing and modifying their pedagogic planning. As far as possible, Arts should be integrated in teaching, especially while teaching the concept which students find difficult to understand.

#### 2.4 Competency Based Learning

Challenges of 21st Century necessitate education to be competency focussed to enable continuous watch on achievement of learning objectives and plan interventions. Competency focussed learning underscores the student's demonstration of desired learning outcomes as central to the learning process. Learning outcomes are statements of expected outcomes that the student will be able to do to know, understand and/or be able to demonstrate after completion of a process of learning as a result of learning the activity. Therefore, the focus is on measuring learning through attainment of prescribed learning outcomes.

Experiential and active learning are the preferred pedagogies for Competency focussed Learning as they promote critical thinking, creativity and effective study skills among students. Learning Outcomes developed by NCERT for classes I-X that is enclosed with each subject should be adopted by all the schools and teaching-learning process may be accordingly aligned. The schools are expected to have well-defined Learning objectives for every grade that are observable and measurable, and empower learners to focus on mastery of valuable skills and knowledge. It is expected that teachers will provide meaningful and joyful learning experiences to the students by adopting variety of innovative pedagogies or instructional activities and go beyond textbooks. Schools are expected to track the attainment of Learning Outcomes by each learner and ensure that no child is left behind.

CBSE has also come out with suggestive mapping of learning outcomes with NCERT curriculum which can be adopted/ adapted by schools. CBSE has also developed many resources to map learning outcomes with pedagogy and assessment to enable tracking of learning progress and these resources are available at the website of CBSE. Schools are advised to attempt this mapping and use of innovative pedagogies to achieve learning objectives.

The Board has developed Learning standard frameworks for all major subjects i.e., Hindi, English, Science, Social Science and Mathematics. The learning standard framework (LSF) offers a structured conceptual map for integrating the discrete elements such as learning outcomes, content, pedagogies and assessments, into a coherent continuum. Its goal is to demystify the 'evidence of learning' and engender a common understanding of it in teachers and examiners by cataloguing competencies in clear, measurable, and contextualized achievement standards. Combining theory and practice,

different LSFs detail how the learning and assessment need to be conducted in classrooms, these frameworks contain detailed guidelines for preparing reliable and valid items along with sample questions and marking scheme for assessment. Model question paper designs have also been laid out our helping teachers prepare the question paper.

#### 2.5 Lesson/Unit Plan

Specific Lesson Plans for the topics are to be prepared by the teachers. These plans may have the following parts:



#### 2.6 Classroom and School Environment

School environment should be conducive to holistic development of the students of varying backgrounds. As part of their policy schools should adopt practices which will promote mental health by following the guidelines issued by the Board on making the school a No-Anger Zone or Anger Free Zone. The Board has also developed school health manuals which are available on www.cbseacademic.nic.in. The time table in the school should take care of proper rest and the children learn subjects with relaxation. School must also ensure that Children avoid the intake of junk food and should ban it around school premises. Intake of the healthy foods should be encouraged with activities described in circular issued by CBSE.

As the surroundings and daily life activities and situations are the best experiential teachers for the students, teachers need to make efforts to draw examples and group activities from daily life observations within the classroom/within the school and surroundings, and encourage presentations and reflection by the students once the activity is completed, to develop the skills of critical thinking and communication.

Children learn a lot through peer learning. To promote peer learning, flexible seating arrangements may be made available during the classroom transactions. The seating should also take care of the needs of the students with disabilities as well. Learning should focus on individual differences and promote collaborative learning. The classroom activities must be connected to the immediate environment of children. The school should maintain connection with the parents and the progress of children should be communicated to the parents, and, if needed remedial measures be taken up for improving the learning outcomes.

#### 2.7 Creating Cross-Curricular Linkages

Creating cross-curricular linkages are vital to learning as they help to connect prior knowledge with new information. For example, Mathematical data handling and interpretation can be effectively applied in geography and science. Children can write better-framed answers in history, geography and science when they have learnt how to write explanations/ short descriptions in a language. Similarly, Life Skills like empathy, problem solving and interpersonal communications can be easily integrated with the study of literature and other areas. Universal Values, Life Skills and Constitutional Values with emphasis on realization of Fundamental Duties may be incorporated depending upon context in almost all the subjects.

#### 2.8 Special Emphasis on Integrating Arts in Education

All disciplines being pursued by students at all stages require creative thinking and problem-solving abilities. Therefore, when Art is integrated with education, it helps the child apply art-based enquiry, investigation and exploration, critical thinking and creativity for a deeper understanding of the concepts/topics. Secondly, Art Integrated learning is a strong contender for experiential learning, as it enables the student to derive meaning and understanding, directly from the learning experience. Thirdly, this kind of integration not only makes the teaching and learning process joyful, it also has a positive impact on the development of certain life skills, such as communication skills, reflection and enquiry skills, un-conditioning of the mind leading to higher confidence levels and self-esteem, appreciation for aesthetics and creativity, etc. Fourthly, this kind of integration broadens the mind of the student, and enables him/her to see the multi-disciplinary links between subjects, topics, and real life. Schools are, thus, required to take up the integration of Art with the teaching learning process.

It must be understood that Art Education and Art Integrated Education may be mutually exclusive, but they build upon each other and strengthen each other. Art Education is not only relevant for developing creativity and appreciation of art among students, but is also necessary for inculcating artbased enquiry skills in the students. Art Education is a necessary precursor for the adoption of Art Integrated learning.

#### 2.8.1 Art Education and Art Integration

The following two-pronged approach is followed:

- Art education continues to be an integral part of the curriculum. The schools may also promote and offer Visual and Performing Arts based subjects at the Secondary and Senior Secondary level.
- ii. Art is also integrated with the teaching and learning process of all subjects from classes 1 to 12, to promote active and experiential learning for "connecting knowledge to life outside the school, ensuring that learning shifts away from rote methods and for enriching the curriculum, so that it goes beyond textbooks."

#### 2.8.2 Art Integrated Pedagogy

While preparing its annual pedagogical plan under the leadership of the Principal of the school, the school must plan out in detail the Art Education to be imparted at various levels, and how that Art can be integrated with classroom learning of various subjects. The focus must be on mutually reinforcing Art as a subject and Art as a tool for learning, with efforts towards seamless integration. Team teaching (combination of subject teachers and Art teachers) would also strengthen the integration.

For implementing this in classrooms, the subject teacher picks the topic/ concept/idea that she wants to teach by integrating Art. The teacher can do this jointly with the Art teacher too. Then, the subject teacher collaborates with the Art teacher to align the pedagogy. Next, the teacher teaches the topic/concept/idea ensuring active learning and ensuring that both the subject and Art are integrated well and there is learning in both areas. Finally, the teacher prepares a rubric to assess the student in both the areas – that is, the topic taught and the Art used.

#### 2.9 21st Century Skills

There is an increased awareness among the educators of the need to integrate what are called as 21st Century skills in educational systems. There are three key 21stcentury skills;

There are three major 21st century skills i.e. Learning Skills, Literacy Skills and Life Skills.

Learning Skills include:

Critical Thinking
Information Literacy
Flexibility

Creativity
Media Literacy
Leadership

Communication
Technology Literacy
Initiative

Productivity
Self-awareness

The need of the hour is that schools must focus on enhancing the skills required for a successful adult life in 21st Century. It is important that the students are able to think scientifically, mathematically or artistically to face the real-life challenges in an information and technology driven world and enhance their inherent potential. CBSE has published a handbook on 21st century skills available at its website. Schools may further refer to it.

#### 2.10 Inclusive Education

Inclusive approach in education is a prerequisite for ensuring full participation of all students with equal opportunity in all areas without any discrimination. Inclusive attitude in all staff and faculty members is crucial for successful inclusive education. Therefore, all the members of teaching and non-teaching staff should be sensitized on the issues of inclusive education. Students without disabilities should also be sensitized.

Schools must organize these sensitization programmes with the support of experts from respective field of disabilities. Capacity Building Programmes on Inclusive Education may be organized in collaboration with the CBSE- Centres of Excellence. Board has made the appointment of special educator mandatory to all the schools affiliated to the CBSE. Special Educators must possess the qualification as prescribed by the Rehabilitation Council of India (CBSE Circular No. 31/2015). CBSE has published a handbook on Inclusive Education which is available at its website.

#### 3. SCHEME OF STUDIES

#### 3.1 Subjects to be offered:

Class IX and X is a composite course. Students therefore should take only those subjects in class IX which they intend to continue in Class-X. Subjects can be offered as under:

Subject		Detail of the subject	Group
	1	Language I (Hindi – Course A or Course B or English Language and Literature or English Communicative)	Group-L
Compulsory	2	Language II (Anyone from the Group of Languages)	Group-L
Compaisory	3	Mathematics – Basic or Mathematics Standard	Group-A1
	4	Science	Group-A1
	5	Social Science	Group-A1
Optional	6	Skill Subject/another subject from A2	Group-S/A2
	7	Language III / Any subject from A2	Group-L/A2
Internal	8	Art Education	
Assessment (Compulsory)	9	Health & Physical Education and Work Experience	

- i. The Board Examination in Mathematics is held at two levels in Class X. However, it is not be applicable to the internal assessment done in Mathematics at the school level in class X. For details, please refer Circular No. Acad. 03/2019. It may be noted that the students who are opting Mathematics Basic will have the option of taking Applied Mathematics (241) as an Elective at Class XI/Sr. Secondary though they may not be permitted to take Mathematics (041) at Sr. Secondary level. However, a student who has opted Mathematics standard can offer any one of the two available Mathematics at Sr. Secondary level.
- ii. If a student fails in any one of the three compulsory subjects (i.e., Science, Mathematics and Social Science) and passes in the Skill subject (offered as sixth optional subject), then that subject will be replaced by the Skill subject and the result of Class X Board examination will be computed accordingly.
- iii. If a student fails in any language subject, out of first five subjects, the same will be replaced by the language taken as sixth subject (in case of no skills subjects offered) or as seventh subject (optional), provided that he or she has passed this language and after replacement either Hindi or English remains as a passed language in the first five subjects.
- iv. It is expected that all the students should have studied three languages up to class VIII. Those students who could not clear the third language in class VIII and have been promoted to class IX, shall be examined by the concerned schools at the end of Class IX in the same syllabus and textbooks as prescribed for class VIII. Those who are still unable to clear the third language at the end of class IX may be given another opportunity in class X. No student shall be eligible to appear in the Secondary School Examination of the Board at the end of class X unless she/he

- has passed in the third language. However, CWSN are exempted from the study of third language.
- v. Either Hindi or English must be one of the two languages to be studied in class IX and X. Hindi and English can also be offered simultaneously. In Hindi, two courses have been provided for class IX and X keeping in view the varying backgrounds of the students and a student may either opt for Hindi A (Code 002) or Hindi B (Code 085). Similarly English can also be offered at two levels English Language & Literature (184) and Communication English (101). However, a language cannot be offered simultaneously at the two levels such as Hindi Course A and Hindi Course B or English Language and Literature and English Communicative etc.
- vi. Students offering additional sixth skill subject may also offer an additional language III/ any subject as seventh subject.
- vii. Out of the three subjects Computer Application (Code 165), Information Technology (Code 402) and Artificial Intelligence (code 417) only one can be offered. A combination of any of these subjects is not permitted.
- viii. Board is extending several exemptions/concessions to candidates with disabilities as defined in the "THE RIGHTS OF PERSONS WITH DISABILITIES ACT 2016". Exemptions/Concessions extended to Persons with Benchmark Disabilities for Class X & XII Examinations conducted\ by the Board and the Standard Operating Procedure for availing these concessions are available on: <a href="https://www.cbse.gov.in/cbsenew/Examination\_Circular/2019/5\_CIRCULAR.pdf">https://www.cbse.gov.in/cbsenew/Examination\_Circular/2019/5\_CIRCULAR.pdf</a>
  Schools and candidates may also refer to the circulars issued by the Board from time to time on this matter.
- ix. For Regional Languages, the Board prescribes the textbooks being followed in classes IX and X in the respective State Boards where the language is taught. Schools are also advised to bring to the notice of CBSE the changes, if any, brought out at the commencement of the session by the respective State Boards, in the textbooks of the language of their State. Schools are directed to strictly follow the textbooks prescribed by CBSE in its curriculum. Changes, if any, can be adopted only after CBSE notifies it.
- Scheme of Studies for Children with Special Needs
   Candidates with disabilities as defined in The Rights of Persons with Disabilities Act 2016 have
   the option of studying one compulsory language instead two.

Subjects		Names of the subjects	Group
Compulsory	1	Language I (Hindi – Course A or Course B or English Language and Literature or English Communicative)	Group-L

	2	A language from Group L or any one subject from Group-A1, A2 and Group-S (Except Automotive)	Group- L/A1/ A2 and S (Except Automotive)
	3	Any one subject from Group-A1, A2 and Group-S (Except Automotive)	Group-A1, A2 and
	4	Any one subject from Group-A1, A2 and Group-S (Except Automotive)	S (Except Automotive)
	5	Any one subject from Group-A1, A2 and Group-S (Except Automotive)	
Optional	6	Any one subject from Group-A1, A2 and Group-S (Except Automotive)	Group-A1/A2 and S (Except Automotive)
Optional	7	Language III (Other than L1 and L2) / Any subject other than opted above	Group-L/ A1/ A2 and S (Except Automotive)
Internal Assessment	8	Art Education	
(Compulsory)	9	Health & Physical Education and Work Experience	

#### 3.2 List of subjects offered at Secondary Level:

	LANGUAGE (GROUP-L)								
S. No.	CODE	CODE Name			Time	Internal	Total		
311101	CODE	rume		Marks	(h)	Marks	Marks		
1	002	Hindi Course-A	(ANY ONE)	80	03	020	100		
_	085	Hindi Course-B		80	03	020	100		
2	184	English Lang & Lit.	(ANY ONE)	80	03	020	100		
_	101	English Communicative	(/	80	03	020	100		
3	003	Urdu Course-A	(ANY ONE)	80	03	020	100		
	004	Urdu Course-B	(* 5 2 /	80	03	020	100		
4	004	Punjabi		80	03	020	100		
5	005	Bengali		80	03	020	100		
6	006	Tamil		80	03	020	100		
7	007	Telugu	(ANY ONE)	80	03	020	100		

	089	Telugu Telangana		80	03	020	100
8	800	Sindhi		80	03	020	100
9	009	Marathi		80	03	020	100
10	010	Gujarati		80	03	020	100
11	011	Manipuri		80	03	020	100
12	012	Malayalam		80	03	020	100
13	013	Odia		80	03	020	100
14	014	Assamese		80	03	020	100
15	015	Kannada		80	03	020	100
16	016	Arabic		80	03	020	100
17	017	Tibetan		80	03	020	100
18	018	French		80	03	020	100
19	020	German		80	03	020	100
20	021	Russian		80	03	020	100
21	023	Persian		80	03	020	100
22	024	Nepali		80	03	020	100
23	025	Limboo		80	03	020	100
24	026	Lepcha		80	03	020	100
25	088	Bhoti		80	03	020	100
26	092	Bodo		80	03	020	100
27	091	Kok Borok		80	03	020	100
28	093	Tangkhul		80	03	020	100
29	094	Japanese		80	03	020	100
30	095	Bhutia		80	03	020	100
31	096	Spanish		80	03	020	100
32	097	Kashmiri		80	03	020	100
33	098	Mizo		80	03	020	100
34	099	Bahasa Melayu		80	03	020	100
35	122	Sanskrit	(ANY ONE)	80	03	020	100
	119	Sanskrit Communicative		80	03	020	100
36	131	Rai		80	03	020	100
37	132	Gurung		80	03	020	100
38	133	Tamang		80	03	020	100

39	134	Sherpa	80	03	020	100
40	136	Thai	80	03	020	100

	COMPULSORY SUBJECTS (GROUP-A1)								
S. No.	CODE	Name	Theory Marks	Time (h)	Internal Marks	Total Marks			
1	041	Mathematics Standard	(ANY ONE)	80	03	020	100		
_	241	Mathematics-Basic	hematics-Basic			020	100		
2	086	Science		80	03	020	100		
3	087	Social Science		80	03	020	100		

		C	THER SU	JBJECTS (C	GROUP-	<b>A2)</b>			
S. No.	CODE	Name		Theory Marks	Time (h)	Internal Marks	Practical	Project	Total Marks
	031	Carnatic Music (Vocal)		30	02	020	50		100
	032	Carnatic Music (Melodic Instruments)		30	02	020	50		100
	033	Carnatic Music (Percussion Instruments)		30	02	020	50		100
1	034	Hindustani Music (Vocal)	(Any One)	30	02	020	50		100
	035	Hindustani Music (Melodic Instruments)		30	02	020	50		100
	036	Hindustani Music (Percussion Instruments)		30	02	020	50		100

2	049	Painting		30	03	020	50		100
3	064	Home Science		70	03		30		100
4	076	National Cadet Corps (NCC)		70	03	30			100
5	165*	Computer Applications		50	02		50		100
6	154	Elements of Business	(Any One)	70	03		30		100
	254	Elements of Book Keeping & Accountancy		70	03			30	100

## SKILL SUBJECTS (GROUP-S)

S.	Code	Name	Job Roles	Marks D	istribution
No.	Couc	Name	Job Roles	Theory	Practical
1	401	Retail	Store Operations Assistant	50	50
2	402*	Information Technology	Domestic IT Executive/Operator	50	50
3	403	Security	Unarmed Security Guard	50	50
4	404	Automotive	Automotive Service Technician	50	50
5	405	Introduction to Financial Markets	Business Correspondent	50	50
6	406	Introduction to Tourism	Assistant Tour Guide	50	50
7	407	Beauty & Wellness	Assistant Beauty Therapist	50	50
8	408	Agriculture	Solanaceous Crop Cultivator	50	50
9	409	Food Production	Assistant Chef (reg.)	50	50
10	410	Front Office Operations	Front Office Executive	50	50
11	411	Banking & Insurance	Field Executive	50	50
12	412	Marketing & Sales	Marketing Assistant	50	50
13	413	Health Care	General Duty Assistant	50	50
14	414	Apparel	Hand Embroider	50	50
15	415	Multi Media	Texture Artist	50	50
16	416	Multi Skill Foundation Course	Multi Skill Assistant	50	50

17	417*	Artificial Intelligence		50	50
18	418	Physical Activity Trainer (New)	Early Years Physical Activity Trainer	50	50
19	419	Data Science		50	50
20	420	Electronics and Hardware (New)	Field Technician-Other Home Appliances	50	50
21	421	Foundation Skills for Sciences (Pharmaceutical and Biotechnology) (New)		50	50
22	422	Design Thinking and Innovation (New)		50	50

<sup>\*</sup>Out of the three subjects with codes - 165, 402 and 417 - only one subject can be offered. The curriculum and the study material for the Skill Electives is available on the CBSE academic website under the tab 'Skill Education' and can be accessed through the link: <a href="http://cbseacademic.nic.in/skill-education.html">http://cbseacademic.nic.in/skill-education.html</a>.

#### LIST OF SKILL COURSES OFFERED AT MIDDLE LEVEL (FOR CLASSES VI/VII/VIII)

S. No.	Course Name	Duration in Hours	Marks Distribution	
5. 110.			Theory	Practical
1	Artificial Intelligence	12	15	35
2	Beauty & Wellness	12	15	35
3	Design Thinking	12	15	35
4	Financial Literacy	12	15	35
5	Handicrafts	12	15	35
6	Information Technology	12	15	35
7	Marketing/Commercial Application	12	15	35
8	Mass Media	12	15	35
9	Travel & Tourism	12	15	35
10	Coding	12	15	35
11	Data Science (Class VIII only)	12	15	35
12	Augmented Reality / Virtual Reality (Level-1/Class 6)	12	15	35

	Birthal Citi and bir /Land			
13	Digital Citizenship (Level-	12	15	35
	1/Class 6)			
	Life Cycle of Medicine and			
14	Vaccine	12	15	35
	Things You should know			
15	about keeping Medicines at	12	15	35
	home			
1.0	What to do when Doctor is	42	45	25
16	not around	12	15	35
17	Humanity and Covid-19	12	15	35
18	Blue Pottery	12	15	35
	·			
19	Pottery	12	15	35
20	Block Printing	12	15	35
21	Food	12	15	35
22	Food Preservation	12	15	35
23	Culinary and Baking	12	15	35
24	Herbal Heritage	12	15	35
25	Khadi	12	15	35
26	Mask making	12	15	35
27	Mass Media	12	15	35
20	How to make a Graphic	12	15	25
28	Novel	12	15	35
29	Kashmiri Embroidery	12	15	35
30	Embroidery	12	15	35
31	Rockets	12	15	35
32	Satellites	12	15	35
33	Application of Satellites	12	15	35

#### 3.3 Instructional Time

Instructional time shall be as per the subjects selected. Schools must ensure that minimum number of hours are spent for each subject as specified in the curriculum. The time duration for the subjects has been clearly indicated in the syllabus of each subject. However, it is expected that schools will create innovative Timetables (such as, teaching-learning only 2 or 3 subjects per day etc.) to ensure that the burden of the bag and homework are substantially reduced and the classroom transaction are based

on experiential processes. Schools may also think of introducing bag-less day and same may be incorporated in the time tables. The time table must also include the mandatory periods for compulsory areas including Health and Physical Education.

#### 3.4 Medium of Instruction

The medium of instruction in general in all the schools affiliated with the Board shall either be Hindi or English for classes IX – X.

#### 4. STRUCTURE OF ASSESSMENT SCHEME

The Assessment scheme will have an 80 marks component for Board examination (class X) and Annual Examination (class IX) in all subjects except compulsory subjects to be assessed internally along with a 20 marks component of Internal Assessment. Students have to secure 33 percent in total in each of these components.

This condition has been relaxed vide Notification No. CBSE/Coord/DS/EC dated11/10/2018 available at: https://www.cbse.gov.in/cbsenew/Examination Circular/2018/15 CIRCULAR.pdf

As the Board is progressively allowing more space to 'learning outcome based' assessment in place of textbook driven assessment, question papers of Board examinations have more questions based on real-life situations requiring students to apply, analyse, evaluate and synthesize information as per the stipulated outcomes. The core competencies to be assessed in all questions, however, will be from the prescribed syllabus and textbooks recommended therein. This will eliminate predictability and rote learning to a large extent.

#### 4.1 Board Examination for (Class X) and Annual Examination (class IX) for 80 marks For Class X:

The Board Examination in each subject will cover entire syllabus of Class-X. Grades corresponding to the marks shall be on the basis of 9-point grading system. Grades will be awarded in each scholastic subject. For awarding the grades, the Board will put all the passed students in a rank order and will award the grades as follows:

Grade	Octile
A-1	Top 1/8th of the passed candidates
A-2	Next 1/8th of the passed candidates
B-1	Next 1/8th of the passed candidates
B-2	Next 1/8th of the passed candidates
C-1	Next 1/8th of the passed candidates

C-2	Next 1/8th of the passed candidates
D-1	Next 1/8th of the passed candidates
D-2	Next 1/8th of the passed candidates
E*	Essential Repeat

#### Notes: -

- i. Minor variations in proportion of candidates to adjust ties will be made.
- ii. In case of a tie, all the students getting the same score, will get the same grade. If the number of students at a score point need to be divided into two segments, the smaller segment will go with the larger.
- iii. Method of grading will be used in subjects where the number of candidates who have passed is more than 500.
- iv. In respect of subjects where total number of candidates passing a subject is less than 500, the grading would be adopted on the pattern of grading and distribution in other similar subjects.

#### For Class IX:

The assessment scheme will be similar to class X Board examination. However, the grading in class IX will be as follows:

Grading Scale for Scholastic Areas (Class-IX)		
(School will award grades as per the following grading scale)		
MARKS RANGE	GRADE	
91-100	A1	
81-90	A2	
71-80	B1	
61-70	B2	
51-60	C1	
45-50	C2	
33-40	D	

 Absolute grading in class IX is used keeping in view the number of students appearing from any particular school as against positional grading used for class X.

#### 4.2 Internal Assessment (20 Marks):

One-time year-end examination is complimented and supplemented with Internal Assessment (IA) that assesses students in diverse manner, at different times and also examines a broad range of curriculum objectives. IA, in effect school-based assessment, plays the dual role of providing a complete picture of students' abilities or progress towards fulfilling the aims of education and informing teachers of students' progress and therefore supporting classroom learning. It also informs the individual learner about his/ her progress over a period of time enabling them to develop strategies to improve learning.

#### 4.2.1 Periodic Assessment (05 Marks)

The main purpose of Periodic Assessment is to assess the learning progress of students. Such Assessment done at regular intervals provides feedback and insight to teachers regarding learners' needs and helps them to improve instruction, do remedial teaching and set curricular targets for a student or a group of students. The feedback also helps students to know their errors as well as strengths and weaknesses. The students, thus, are enabled for better learning and setting up realistic goals. In essence, this is assessment for, of and as learning. Periodic Assessment is further divided into the following:

**Periodic Tests (05 marks):** As earlier, these would be restricted to 3 in each subject in a year and the average of best 2 would to be taken for final submission of marks. These tests tend to follow a pattern, which is quite similar to the final end of course examination, and have a gradually increasing portion of content. Hence, they also tend to prepare students for final summative exams in a more confident manner.

#### 4.2.2 Multiple Assessment (05 marks):

Over the course of the curriculum transaction, multiple assessment strategies are advised. Subject teachers would determine the type and frequency. Schools/teachers would be able to use multiple and diverse assessment techniques to assess learners, i.e., observation, oral tests, individual or group work, class discussion, field-work, concept maps, graphic organizers, visual representation etc. Hence, the schools are given autonomy to use alternate modes of assessment as per the demand of the subject and the context towards addressing the goal of assessment for and as learning, such as quizzes, project-work, Self and peer assessment, collaborative projects, experiments, classroom demonstrations, etc.

Caution must be exercised to ensure that recording such assessment is not cumbersome and can be easily translated into individual student scores. When choosing a particular technique, developing simple scoring criteria and rubrics becomes equally important. The purpose of periodic assessment is

to provide feedback to improve teaching and learning, so it is equally important to use follow-up measures when students are found to be lacking proficiency.

#### 4.2.3 Portfolio (05 marks):

A portfolio is a collection of chosen work by a student representing a selection of performances. It is a tool for assessing a variety of skills not usually testable in a single setting of the traditional written paper and pencil tests. Portfolio helps students gain an awareness of their own learning. Peer Assessment is a great support that facilitates a clear understanding and evaluation of personal goals. The active role that students plays in self-assessment not only motivates them but also help to develop metacognitive skills which enable them to make adjustments. The creation of portfolios is suggested to broaden the scope of learning and achieve diverse curriculum outcomes by examining a range of evidence of student performances being assessed.

The portfolio may take the form of a journal or notebook that would include students' artifacts selected along with their reflections. Learner here is an active participant involved in constructing his or her journey through the portfolio building process of selecting, organizing and reflecting. It is suggested that the portfolios would include classwork and homework assignments that would help evaluate learner's progress. The attention should be to promote techniques such as annotation, identification of key words / topics/ themes, summarization and organization of ideas and content, photos, presentations, assignments, art integrated learning, etc. Developing them should not be a burden on students- both in terms of cost and time.

#### **Assessing Portfolios**

Students' portfolio can be effectively evaluated using a simple scoring rubric. The criteria – to be used in determining the quality of a particular student's portfolio needs to be carefully developed and shared with students. They key elements of the particular criteria need to be specified as well. Suggested below are some elements to judge student's portfolio:

	Organization – Neatness, Creativity and Visual Appeal
Elements to judge student's	Completion of guided work focused on specific curricular objectives
portfolio	Evidences of student's growth
	Inclusion of all relevant work (completeness)

#### 4.2.4 Subject Enrichment Activities (05 marks):

Subject enrichment activities aim at enrichment of the understanding and skill development of students. They provide in-depth learning that motivates students to dig deeper into the discipline. These enrichment activities need to challenge students and permit them to apply knowledge to the next level. They ought to provide opportunity to students to explore their own interests as well as an understanding of the nature of particular discipline. Some suggestions for conducting these activities are as follows:

Languages provide ample space and the autonomy to subject teachers to develop relevant listening and speaking skills. Teachers need to use this opportunity to full advantage and use excerpts from relevant suitable literature to develop vocabulary and heighten students' awareness and sensitivity.

The specified activities in practical work in Science and Mathematics need to be conducted in congruence to the objectives of the subject. The focus must shift from confirmatory nature of lab experiments to explorations that focus on development of science processes. Students need to be encouraged to raise questions, generate hypotheses, experiment, innovate and find solutions to questions/ problems encountered.

Social science being the subject relevant to social context, activities and projects in this area should be related to, society, socio-economic and environmental problems, political theory and art and culture. I may also include development of Life Skills.

#### 4.3 Art Education

Art Education constitutes curricular activities for the development of the wholesome personality of the children, aesthetic sensibilities and respect for social values and cultural heritage. It encourages learners to develop creative expression, sharpens keen observation and develops a sense of organization and order. Exploring into ideas and meanings through the works of artists/experts/writers/poets, the students would develop imagination and critical awareness. Students may select one form each from Visual Arts (drawing, painting, murals, collages, crafts, sculpture, etc.) and Performing Arts (dance, music, drama, puppetry and Folk Art forms etc.). Children's participation in activities/competitions form the basis of assessing the student.

#### 4.4 Health and Physical Education (Sports/Self-Defence/Yoga/NCC etc.)

Focus of this area of curriculum is on health, hygiene and sanitation, work experience, indigenous sports, yoga, NCC, self-defence, fitness and lifestyle choices. Health and Physical Activities, preferably sports must be given one regular period per day. Students should be provided opportunities to get

professionally trained in the area of their interest. Indigenous sports, yoga and NCC must be encouraged in the schools. Similarly, Self-defence may be actively taught to students, especially girl students, as it instils confidence and empowers them.

The teachers should ensure that the students get opportunities to participate in activities of their choice and help them in identifying and nurturing their talents and gain confidence. The Physical Education teacher will maintain the record of all the Health and Physical Education activities/competitions that each of the children participate in. The Comprehensive School Health Manuals (four volumes) brought out by CBSE could be referred to for detailed information and the graded activities could be taken up as part of the curriculum in school.

Qualified doctors should examine children annually along with a follow-up session during the year to address the health aspect of HPE. School should also bring any noticeable disability in a student to the notice of the school counsellor and parents. Cases of special needs of students with medical history must be carefully noted and handled accordingly. Detailed information on the Comprehensive Physical and Health Education Curriculum is enclosed with this document.

#### 4.5 Assessment of Art Education and Health and Physical Education

Assessment of Art Education and Health and Physical Education may be continuously done by collecting information, reflecting on and using that information to review children's progress and to plan future learning experiences. The documented data, after interpretation, should be reflected in the Report Card of the children in the form of grades.

In the existing scheme of assessment, these activities will be graded on a 5- point grading scale (A to E) for classes IX-X and will have no descriptive indicators. The students shall be assessed on two areas i.e., Art Education, Health and Physical Education. Work Experience is subsumed in the Physical and Health Education. No up scaling of grades will be done.

The concerned teacher would make an objective assessment of the level of performance/participation demonstrated by a student throughout a year and finally assign grades.

#### 4.5.1 Parameters of Assessment

While the students are engaged in the core areas like Health and Physical Education and Art Education, the process is as important as the product. Hence, the assessment in these areas should take account of both aspects.

The basis of assessment has been suggested below:

Area	Product	Process
Health and Physical Education including Work Experience	Overall fitness	Participation, team-spirit, commitment and honest effort.
Art Education	Expression, creativity and Aesthetic appeal	Participation, Creative process, material use, appreciation, reflection, effort, craftsmanship and completion

#### 4.5.2 Details of Five-point Grading for Art Education (Class IX and X)

Grade	Connotation
А	Exemplary
В	Proficient
С	Developing
D	Emerging
E	Beginner

## 4.5.3 Distribution of Periods/Grades for Internal Assessment in Health and Physical Education (with Work Experience subsumed in it)

Strand	Periods (approx.)	Grades*
1. GAMES		
Athletics/Swimming Team		While filling online data, following grades
Games	90 periods	may be filled against HPE:
Individual Games / Activities		Class IX-X: Grade (A-E) on 5-point scale (A, B,
Adventure Sports		C, D, E)
2. Health and Fitness	50 periods	
		Grades of SEWA is considered against Work
3. SEWA	50 periods	Experience Class IX-X: Grade (A-E) on 5-
		point scale (A, B, C, D, E)
4. Health and Activity Card		

<sup>\*</sup>Refer the detailed HPE guidelines available on <a href="www.cbseacademic.nic.in">www.cbseacademic.nic.in</a>, including the above amendment.

#### 4.6 Development of Competencies Through Student Enrichment Activities:

In the recent past the board has been organizing various activities for promoting various 21st century skills. Following are some such activities introduced with the intention of enhancement of the skills and values.

S. No.	Student Enrichment Activity	Skills/Values to be Enhanced	
1.	Story Telling Competition		
2.	Reading Week, Budding	Thinking Skills: Creative, Analytical, Evaluative	
۷.	Authors	Communication Skills, Linguistic Skills	
3.	Fastest Reading Contest		
		Reasoning Abilities, Problem Solving Skills, Critical	
4.	Aryabhata Ganit Challenge	thinking, Analytical thinking, Ability to manipulate	
٦.	Aryabilata daliit challenge	precise and intricate ideas, Ability to construct logical	
		arguments	
		Values of respect for diversity and tolerance,	
5.	CBSE Heritage India Quiz	Awareness about preserving Indian heritage and	
J.	CBSE Heritage India Quiz	monuments, Critical thinking skills, Appreciation for	
		rich heritage and diversity of the country	
6.	Science Exhibition	Critical and Creative Thinking Skills, Problem Solving	
7.	Science Literacy Promotion	Skills, Scientific Temperament, Connecting Science to	
/.	Test	day-to-day life	
8.	Expression Series	Creative Thinking Skills Communication Skills	
9.	Eco-Club Activities	Awareness about Environmental Conservation and	
10.	Swacchata Abhiyan	Protection	
11.	Ek Bharat Shrestha Bharat		
12.	Rashtriya Ekta Diwas	Spirit of Patriotism and Unity Creative Skills	
13.	Inter School and Competition		
14.	Fit India School week		
15	CBSE Inter-School Sports &	Hoalthy lifestyle	
15.	Games Competitions	Healthy lifestyle	
16.	International Day of Yoga		
17	Matri Phacha Diwas	Awareness of Linguistic and Cultural traditions, Values	
17	Matri Bhasha Diwas	of Tolerance and Dialogue, Communication Skills	

18	The Constitution Day	Importance of Constitution, its history, structure and implications to citizens, orientation to composite culture and diversity of our nation awareness of Fundamental Rights and Duties as enshrined in the Indian Constitution.
19.	Art Integrated Project	Application of art-based enquiry, investigation and exploration, critical thinking and creativity for a deeper understanding of the concepts/ topics, promotes experiential learning as it enables to derive meaning and understanding directly from the learning, enables students to see the multi-disciplinary linkages between subjects, topics, and real life.

Schools are encouraged to ensure that their students participate in these activities of the Board for making the students future-ready and also for becoming a holistic learner.

#### 4.7 Suggestions for Teachers

A teacher is expected to achieve at least all the stipulated class level learning outcomes in her students. Teachers feel accountable for the progress of her students and act with utmost honesty and integrity. They must constantly do self-assessment of their subject knowledge and skills and strive hard to keep them up-to-date in this area. Teachers may regularly visit CBSE's website for latest updates and must participate in a minimum of 50 hours of annual capacity building programmes at different levels. Teachers are required to work with other teachers and parents in the best interests of their students and need to:

- set high expectations to motivate and challenge students and help students to reflect on their progress;
- ii. carefully go through the curricular aims, and learning outcomes as stipulated in the National Curriculum Framework for foundational stage 2022 and National Curriculum Framework for Secondary classes;
- iii. analyse the need of her students and innovate or improvise to address this need in the best possible manner and facilitate the inculcation of 21st-century skills in her students;
- iv. ensure a safe and conducive environment for students as per the statutory provisions mentioned in the affiliation bye-laws of CBSE;
- v. follow inclusive practices for students of varying backgrounds;

- vi. lead by example by demonstrating constitutional values, positive attitudes, and behaviour;
- vii. help the principal in formulating an annual pedagogic plan and prepare and teach by using well-structured lesson plans. Also, follow the statuary provision of instructional time and directions of CBSE regarding Experiential and joyful Pedagogy and Art-integrated education;
- viii. set homework as per the directions of CBSE and plan other activities to consolidate and extend the knowledge and understanding students have acquired;
- ix. study Assessment Frameworks and other resources to make accurate and productive use of competency focussed formative and summative assessments. Regularly conduct a formative assessment to assess the effectiveness of her teaching and use relevant data to monitor progress, set targets, and plan subsequent lessons;
- x. provide students regular feedback and encourage them and their parents to respond to the feedback;
- xi. use effective classroom management skills to ensure a conducive learning environment;
- xii. treat students with dignity, and use proper discretion in line with statutory provisions like RTE-Act, POCSO, CBSE affiliation bye-laws guidelines of NCPCR, etc.;
- xiii. maintain high standards in their own attendance and punctuality; and
- xiv. perform duties assigned by CBSE from time to time.

#### 4.8 Values Education and Life Skills

Constitutional and universal values should also be encouraged amongst students. Hygiene, sanitation, dedication, honesty, truthfulness, kindness, empathy respect for the environment, elders and all living things etc. are the values that our students must actively practice. Parents may also support schools in cultivating disciplined behaviour in their wards. Class teacher will grade the students on a Five-point scale (A to E) keeping in view the overall attendance, sincerity, values and behaviour of the students. Values Education Resource Book and Kit developed by CBSE may be used for inculcating values in students.

Similarly, schools endeavour to inculcate Life Skills and 21<sup>st</sup> Century Skills as per the directions and material developed by CBSE.

#### 4.9 Rules Regarding Admission and Examination

Regarding eligibility for Admission, Eligibility for Examination, Scheme of Examination and related information, please see the Examination Bye-Laws of CBSE available on www.cbse.nic.in.

#### 4.10 Introduction of National Curriculum Framework for Foundational Stage-2022.

NCF-FS 2022 will be introduced in the Session 2024-25 in those CBSE schools which offer education at foundational stage to students in the age group of 3-8 years. Schools offering foundational or preparatory education are mandatorily required to adhere to the recommendations regarding curriculum, pedagogy, assessment and other areas described in detail in the NCFFS-2022.

While schools offering classes I to X / XII may make efforts to gradually augment the infrastructural requirements to include pre-primary classes, schools already running foundational classes may continue to offer 2 or 3 years of pre-primary education as per the practice followed in their respective State, till the time State Government adopts the 5+3+3+4 structure.

Teacher's qualifications remain same as per the existing National Council of Teachers Education's notification no 62-1/2012/NCTE(N&S) dated November 12,2014 and its subsequent amendments.

Schools are advised to go through the NCF-FS-2022 document available at <a href="https://ncert.nic.in/pdf/NCF">https://ncert.nic.in/pdf/NCF</a> for Foundational Stage 20 October 2022.pdf for its implementation.

The NCF-FS includes many examples and illustrations which play a critical role in its implementation. They help to clarify abstract concepts, reinforce learning, and make new ideas more accessible to practicing teachers. Myriad examples are aptly incorporated to enhance understanding, foster engagement, and elaborate concrete ways concepts can be implemented in day-to-day teaching. So, it is critical that teachers look at these illustrations and contextualize them according to the needs and contexts of children.

#### 4.11 Academic Guidelines

Major academic highlights of NCFFS-2022 for the benefit of schools are reproduced as hereunder:

#### i. Curricular Goals and Learning

NCF-FS-2022 identifies five key domains of development viz., Physical Development, Socio Emotional and Ethical Development, Cognitive Development, Language and Literacy Development, and Cultural Development, and Positive Learning Habits. Illustrative Curricular Goals, Competencies, and Learning Outcomes for the foundational stage in all these domains are given in NCF-FS-2022. Teachers should adapt the same in their curriculum to be designed by schools. The curriculum followed by schools should make specific choices for content and materials based on the Learning Outcomes, the principles, and guidelines of NCF along with considerations for the local context. Schools will follow their curriculum based on NCF-FS-2022 till the time syllabus is provided by NCERT. Once the syllabus is provided by NCERT, schools may adopt/adapt the same.

For the Foundational Stage, it would be appropriate to develop activity books and other handbooks for Teachers, that would guide them through the sequence planned in the syllabus. The syllabus should include broad guidelines for assessments that check for the achievement of Learning Outcomes.

#### ii. Organisation of Content

The selected content should be empirically engaging (e.g., engaging the child's senses) and/or relevant to their experience. It should be based on the child's experiences and reflect the child's socio-cultural and geographical context. Furthermore, content should introduce natural and human environments, the social and physical world, people, places, and living and non-living things. To accommodate the varied interests of individual children, the content should be diverse and inclusive. Special care should be taken to preclude the promotion of stereotypes.

Textbooks might be inappropriate for children of ages 3 to 6, activity books can guide Teachers to sequence activities and learning experiences. Textbooks can be introduced in class 1 and they must allow for the children's active participation. Workbooks and textbooks ought to be complementary to one another. Audio-visual materials including flashcards, cardboard-and-sandpaper, shapes of alphabets, games, and puzzles should adequately supplement textbooks.

When foundational stage children actively engage their hands and employ various senses, they learn more effectively. It is, thus, important to go beyond textbooks and use a range of Teaching Learning Material (TLM) at this Stage, from basic playthings to specific manipulatives for counting and numeracy. The majority of the TLM needed for the Foundational Stage can be constructed with readily available low-cost materials. For example, cardboards, straws, packaging material, old clothing, bottle caps, seeds, and pebbles (for counting), match sticks (without chemicals), discarded paper, coconut shells, and egg cartons (for sorting). Teachers can bring leftover fabric to create puppets, soft cloth balls, and other playthings. Young children can find making basic toys, puzzles, and board games to be particularly engaging activities that allow them to use all of their developmental domains.

The language content should contain a fair mixture of narratives, poetry, and information on local, natural and social contexts. Content on both flora and fauna as well as social and cultural issues allows youngsters to grasp the world around them while stories and poems develop young children's linguistic and imaginative abilities. Schools will aim to ensure the availability of teachers so that at least two or preferably three languages are taught to children on a regular basis.

Reading and writing should be initially developed through R1 (language in which a child first learns the concept of reading and writing) which is preferably L1 (mother tongue/ home language / familiar

language) whenever possible, via early exposure to oral language development, meaning-making activities, and print materials. Understanding of phonemes and graphemes and the correspondence between them (decoding) will be developed through games and interactive exercises. The aim should be to achieve literacy skills in R1 by Grade 3.

Mathematical content can represent engagement with the surrounding environment, much like language can. Counting and other mathematical tasks can be combined with interactions with the natural and social settings.

The content of art learning experiences should be derived from the school's local environment and designed as activities centred on specific learning outcomes.

Schools may also make use of the *Jadui Pitara* (Collection of teaching-learning material) prepared by NCERT for the teaching-learning process for the Foundational Years. *Jadui Pitara* is available at DIKSHA portal. Further, it is recommended that all related Teaching-Learning material for Foundational Stage being released by NCERT be used for teaching-learning purposes.

#### iii. Pedagogical Practices

CBSE advocates experiential, activity based and joyful learning. As part of its conceptual, operational, and transactional approach to curriculum structure, pedagogy, time and content organisation, and the overall experience of the child, NCF-FS2022 emphasises the significance of "play" as the cornerstone of these concepts. Play, in addition to sports and games, also includes singing songs, conversations, toys, stories, music, puzzles, rhymes, art and craft, painting, clay moulding, dancing, etc. Different children learn at different paces, and in different ways. So, it's crucial to avoid pressurising students to adopt a certain learning style. Children should be allowed to play with anything that engages them, is safe and easily available. In early education, experiential learning is essential. Projects give kids the chance to hone a variety of abilities, especially those that require peer collaboration.

Stories stimulate learning in children, and helps them build their own vocabulary. Stories not only introduce children to the world outside of their immediate experience but also to a wealth of resources for language learning and developing, helping youngsters acquire much more than just words. Stories help develop curiosity, imagination and intellect, promote emotional and social growth, making them an effective tool for children's overall development.

Schools may use thematic approach at this stage as a variety of curriculum areas are connected and integrated within a theme. Children are assisted in making meaningful connections through a theme and exploring different themes or elements within the theme as opposed to learning different skills at different times or learning distinct subjects.

Each of the aforementioned strategies has unique merits. A single, particular strategy for teaching and learning is not recommended. Depending on their environment and needs, teachers and schools are left to choose the best method for creating learning content and transaction of teaching learning.

#### iv. Assessment

Overall approach in these years as in all higher classes is also competency focussed assessment using a variety of techniques. However, assessment should not contribute to any additional burden for the child, should not overtly burden the teacher and care must be taken not to label the child. Teachers should try to provide each child individual care and attention and keep observing what they are doing.

The stipulated learning outcomes may not be achieved in a linear fashion for all students. Children take their time and have their own ups and downs during their journey towards achieving these learning objectives. Teachers, thus, need to be very patient provide adequate space and time to each child as per her/ his need and not be overbearing. Some of the strategies that can be employed to assess progress of children may be guided observation, storytelling etc. Tools of assessment may include anecdotal records, checklists, event sampling and analysis of artefacts and workbooks. Teachers should analyse evidence from multiple sources taken over a period of time to assess the extent to which children have demonstrated understanding and acquisition of skills.

There should be no ranking of students at this stage as each child is unique. A teacher can sometimes accomplish a range of distinct curricular objectives and competences just by telling a story, having a conversation, or playing a game. Therefore, the teacher should have the freedom to conduct activities as she / he seems fit in the context of their classrooms.

More details can be found in the format of Holistic Progress Card for foundational stage developed by CBSE.

#### v. Identification of Developmental Delays

In order to ensure holistic and inclusive education, it is important to ascertain provisional cases of developmental delay in children significantly lagging in achieving developmental milestones in physical, cognitive, communication, social-emotional, behavioural, - or a combination of domains. NCFFS-2022 emphasizes the importance of early identification and intervention to ensure individual children receive timely and appropriate help. Though schools and Teachers are not supposed to confirm developmental delay or disability and should refer the perceptible cases to authorized medical professionals for diagnose, however, they can take the following steps to identify provisional cases for referring to clinical diagnosis:

**Screening:** Schools often conduct universal developmental screening to identify children who may be at risk for developmental delays. These screenings can be done by teachers, school psychologists, or other professionals using standardized assessment tools.

**Teacher observations:** Teachers spend a significant amount of time with their students and are well-positioned to observe developmental delays. Teachers can use checklists or rating scales developed by World Health Organisation to track their students' developmental progress and identify areas where children may need additional support. NCERT's PRASHAST is a checklist that enables the identification of children at risk. It comprises two parts - for use by regular teachers for first-level screening, and for use by special educators and others for second-level screening. It is a safeguard against unscientific diagnosis and needless labelling of children. It is aligned with the Rights of Persons with Disabilities Act (RPWD) Act 2016.

**Parental concerns:** Parents are often the first to notice developmental delays in their children. School staff should listen to parents' concerns and take appropriate action to assess and address any developmental concerns.

**Standardized testing:** Schools may administer standardized tests to assess academic skills, cognitive abilities, or social-emotional development. If a student performs significantly below their peers on these assessments, it may indicate a developmental delay.

The framework also encourages teachers to work closely with parents and caregivers to support children's learning and development. It emphasizes the importance of building strong partnerships between schools and families to create a supportive and collaborative learning environment for children.

Schools may make use of practical ideas and Sample Individual Education Programmes given in the framework to identify and support children with developmental delays.

#### vi. Use of Technology

Technology can be used to enable equitable access to a diverse range of content and material in diverse forms, spaces, and formats that is contextual for children of varying backgrounds including Divyang (CWSN) children.

Technology can enhance the learning experience and create new opportunities. It empowers students to be more creative, connected and collaborative with their peers and teachers. Using technology gives the opportunity to develop student's digital citizenship skills. As use of digital devices is bound to increase with passage of time, it is important for children to learn from their initial years to use

digital devices with responsibility. Technology should also provide an enjoyable experience for the learner and feed the child's innate curiosity.

Schools must also use technology in Capacity Building of Teachers, parents, and the community.

#### vii. The Learning Environment

A welcoming, compassionate environment where collaboration, inquiry, dialogue, and reflection are commonplace is a prerequisite for effective teaching and learning. Teachers require surroundings that are resource-rich, inspiring, and that offer ongoing chances for professional development and connection.

Access to safe infrastructure viz., potable water, clean and well-maintained restrooms with running water, arts and crafts supplies, furniture to set up learning corners, and a variety of children's books and learning resources must be available to enable a conducive learning environment.

#### viii. Organisation of Time in the School

The National Curriculum Framework for Foundational Stage 2022 highlights the importance of careful planning and organisation of time by allotting adequate and equitable time to all domains to achieve holistic education of children. Each activity may be planned to keep in mind the attention span of the child. There may be a balance between child-initiated and Teacher-guided activities, group (whole group or small group) and individual or pair activities, and alternating activities (e.g., quieter activity after physical activity, group activity after individual activity, indoor activity after outdoor activity). Art and Craft, Outdoor Play, and Free Play must have adequate time and focus during the day. Frequent breaks and transitions may also be provided to allow children to regain their energy and interest.

To achieve this, the curriculum framework recommends a balanced distribution of time across different areas of learning, such as language, mathematics, environmental studies, arts, and physical education. Illustrative examples are provided for schools to help in formulating their own schedules.

Similarly, the NCFFS advocates the need for the preparation of an annual calendar detailing all important school events prior to the commencement of the school academic year. Events of the school e.g., duration of the school term, vacations, annual day, sports day, other school celebrations, exhibitions/field trips, parent-teacher meetings, teacher professional development programs, and school meetings may be a part of this calendar.

#### ix. Culture of the Institution

Fundamentally, if children are loved and cared for, they will learn. Teachers should be kind and compassionate. The school should be a safe space for all children. Children learn from their parents

(the mother being the first teacher), the teacher in the classroom and the environment around. Therefore, it is vital that the school works seamlessly with the parents and the community to provide maximum learning opportunities for all children.

#### x. Teacher Orientation and Continuous Capacity Building

Through a variety of channels, teachers must consistently engage in their professional growth. The content must address the difficulties teachers confront, be thorough and complete, relevant to the classroom. It is necessary to provide platforms for peer learning with mentoring and assistance to teachers. Schools are required to fulfil the mandate given by CBSE regarding annual minimum teacher training hours.

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#### Guidelines on National Curriculum Framework for School Education -2023

The National Curriculum Framework for School Education (NCF-SE) serves as the guiding framework for the 5+3+3+4 schooling model proposed in the National Education Policy 2020 (NEP 2020). The framework is organized into five parts, covering broad aims, cross-cutting themes, subject-specific guidelines, school culture, and requirements for an effective schooling ecosystem. It was developed with a comprehensive approach covering all four stages of schooling, namely the Foundational Stage, Preparatory Stage, Middle Stage, and Secondary Stage. Schools are advised to follow the following guidelines for implementing NCF-SE-2023:

- 1. **Ensure Comprehensive Coverage**: Implement the framework to address learning standards, content selection, pedagogy, and assessments for each stage of schooling.
- 2. **Facilitate Practical Implementation**: Provide guidance that is understandable and applicable to teachers and parents to facilitate practical changes in educational practices.
- 3. **Ensure Clear Learning Standards**: Follow the specific learning standards for each subject to provide a clear direction for educators and stakeholders, emphasizing competency development as provided for different stages in the NCF-SE-2023.
- 4. **Focus on Holistic Development**: Foster not only knowledge but also fundamental capacities such as critical thinking, creativity, and values essential for holistic growth.
- 5. **Empower Teachers and Schools**: Design the curriculum to empower teachers and institutions, fostering creativity and engagement in the teaching-learning process.
- 6. **Encourage Diverse Pedagogical Approaches**: Encourage a variety of pedagogical methods tailored to different age groups and contexts, including experiential, play-based, and inquiry-based approaches.
- 7. **Integrate Cultural Values**: Root the curriculum in Indian knowledge and values, integrating contributions from ancient to contemporary times across various subjects.
- 8. **Promote Multidisciplinary Education**: Foster multidisciplinary learning to cultivate an integrated perspective and holistic understanding among students.
- 9. **Ensure Equity and Inclusion**: Guided by principles of equity and inclusion, ensure access to quality education for all learners.
- Emphasize Art, Physical Education, and Well-being: Renew emphasis on Art Education and Physical Education, incorporating specific learning standards and recommended time allocations.
- 11. **Prioritize Environmental Education**: Recognize environmental challenges by emphasizing environmental education across all stages of schooling.
- 12. **Integrate Vocational Education**: Integrate vocational education with specific standards, content, pedagogy, and assessments.
- 13. **Foster Multilingualism**: Emphasize multilingualism, expecting proficiency in at least three languages, including Indian languages. Refer to CBSE advisory No: Acad-84/2023 dated July 21, 2023, for detailed guidelines.
- 14. **Enhance Mathematical and Scientific Literacy**: Emphasize conceptual understanding and procedural fluency in Mathematics, alongside the development of scientific inquiry skills.

- 15. **Adopt Interdisciplinary Learning**: Encourage an interdisciplinary approach in Social Science education, exploring themes across human societies and natural environments.
- 16. **Provide Flexibility in Secondary Stage**: Offer flexibility and choice in the Secondary Stage, allowing students to select subjects aligned with their interests and aspirations.
- 17. **Introduce Interdisciplinary Areas of Study**: Introduce separate interdisciplinary areas of study in the Secondary Stage to address contemporary challenges using knowledge from multiple disciplines.

Further, in line with the NCF-SE 2023, it is imperative for schools to reassess and transform their approach to assessments. Here are some guidelines to facilitate this transformation across different stages of schooling:

#### **Foundational Stage:**

- Ensure assessment methods are aligned with children's natural learning experiences, avoiding undue pressure.
- Assessment tools should seamlessly integrate with learning experiences, avoiding the use of traditional tests and exams.
- Recognize and accommodate the diversity in children's learning styles and expressions, allowing teachers the flexibility to design various assessment methods effectively.
- Facilitate systematic recording and documentation of children's progress through evidence collection.
- While teachers should have autonomy in selecting assessment tools, systematic recordkeeping is crucial for professional responsibilities.
- Prioritize observation of children and analysis of their created artifacts as primary assessment methods.

#### **Preparatory Stage:**

- Establish a robust system of formative assessment to track individual student progress as formal learning commences across various subjects.
- Help students understand the competencies they are expected to achieve, facilitating their understanding.
- Introduce formative oral and written assessments, alongside observation and artifact analysis, to assess conceptual understanding and creativity.
- Conduct comprehensive summative assessments at the end of each year to ensure readiness for the next grade, providing support options during breaks between grades.

#### Middle Stage:

- Maintain a competency-based assessment approach, covering all dimensions of learning, particularly with the introduction of complex concepts.
- Shift emphasis towards conceptual understanding and higher-order capacities, utilizing various assessment techniques like projects, debates, and presentations.

- Focus regular assessments on testing conceptual understanding and higher-order capacities, encouraging creativity through appropriate questions.
- Conduct yearly comprehensive summative assessments, offering support options to ensure readiness for the next grade.

#### **Secondary Stage:**

- Emphasize regular formative assessments to facilitate meaningful learning and constructive feedback, especially considering the greater subject depth.
- Continue utilizing classroom assessments, with self-assessment playing a significant role in student learning.
- Design assessments to evaluate competencies using diverse methods such as case-based questions, simulations, and essay-type questions, fostering creativity.
- Utilize a variety of assessment methods, including written tests, practical tests, projects, and open-book tests, with comprehensive summative assessments conducted at the end of each year or term, often in the form of board examinations.

Additionally, implement Holistic Progress Cards (HPCs) as formal communication tools between schools and families, providing comprehensive reporting of students' progress based on competencies and learning outcomes achieved. HPCs should focus on individual progress and interests, providing disaggregated reporting to avoid comparisons with peers. Detailed guidelines and prototypes of HPC have been provided by CBSE for foundational classes.

## CBSE | DEPARTMENT OF SKILL EDUCATION

### **CURRICULUM FOR SESSION 2024-2025**

## **RETAIL (SUBJECT CODE - 401)**

**JOB ROLE: STORE OPERATIONS ASSISTANT** 

#### CLASS - IX

#### **COURSE OVERVIEW:**

A retailer is one who stocks the manufactured goods and is involved in the act of selling to the final customer or consumer, at a margin of profit. Retailing is the last link that connecting the individual consumer with the manufacturing and distribution chain. It adds value in terms of bulk breaking and providing a wide variety of goods and services to customers as per their needs.

The retail industry is divided into organised and unorganized sectors. Organised retailing refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the corporate- backed hypermarkets and retail chains, and also the privately owned large retail businesses. Unorganized retailing, on the other hand, refers to the traditional formats of low-cost retailing, like, the local kirana shops, owner manned general stores, paan/beedi shops, convenience stores, hand cart and pavement vendors, etc.

Organised retail can be categorized by the type of products retailed as well as the by the different kind of retail formats. The major retail formats include Department store, Supermarkets, Hypermarket, Specialist Stores, Convenience Stores, and Kiosks. The various operations involved in store operation and management include Store Operations, Back end operations, Merchandising, Logistics and Distribution, Marketing, Procurement/Purchase, and Corporate Services.

After completion of this course the learner would be able to work as store operations assistant in organised retailing and may look after overall store operations. He/she can also motivate other coworkers and who assist customers in finding merchandise, introduce customers to new merchandise, and move the goods from racks to billing counters. He also serves internal and external customers in a retail environment with respect to product receiving, movement, storage and delivery. He needs to be physically fit to withstand working in a retail environment whilst being customer responsive towards service delivery.

#### **OBJECTIVES OF THE COURSE:**

In this course, the students will be introduced to the fundamental concepts of Retail Management and the career opportunities available in this field. This course provides an insight to the students regarding various issues associated with store operation, visual merchandising, merchandising, inventory management, retail sales etc. Class participation would be fundamental for the development of transferrable skills.

Followings are the main objectives of this course.

- To familiarize the students regarding various dimensions of retail management and career opportunities available in these fields.
- To develop practical understanding among the students associated with retailing through classroom discussion/ participation and projects.
- To develop transferrable skills among the students for managing retail operation efficiently so that they could be ready to join the retail industry.
- To provide knowledge to students in concise and understandable format so that students could learn and apply these concepts in their career for the growth.
- To provide brief insight about floor operation, product display, product handling, inventory management and retail sales.

#### **SALIENT FEATURES:**

- Retailing involves direct interaction among buyers and sellers.
- Across the world, the number of retail outlet is more than any other forms of the business.
   India is known as nation of the shop as there are more than 13 million retail outlets in the country.
- Retail business primarily deals with B to C market rather than B to B market. In retailing, sales volume is comparatively large in quantity but lesser in monetary value.
- Location and lay out design of the store are critical success factor for the growth of the store.
- Retail is very localized business and it is in transition phase; mergers, acquisition among the retail firms are taking place across the globe.
- Retailers are developing new business format. On line retailers are growing at very high pace and it is impacting the business of traditional store.

#### **LIST OF EQUIPMENT AND MATERIALS:**

The list given below is suggestive and an exhaustive list should be prepared by the vocational teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

#### **Material Required for Store Operations Assistant:**

- 1. Shelves for Stacking Products
- 2. Shopping Cart
- 3. Signage Board Retail
- 4. Offer / Policy Signage
- 5. Big Poster (at POS) for offer related advertisement
- 6. Gondola
- 7. Products for display (Dummy Cameras and Mobiles)
- 8. Danglers
- 9. Coupons and Vouchers
- 10. Carry Bags
- 11. Physical Bill Copy
- 12. Bar Code Machine
- 13. Customer Feedback Form
- 14. Safety and security equipment's on site-
  - Fire extinguisher
  - Security cameras
  - LCD screens
  - Safety sign boards
  - Personal protective equipment's (PPE) like gloves, helmets, jackets, harness etc.
  - Locking systems
- 15. Housekeeping equipment's on site
  - Vacuum cleaner
  - Mops
  - Cleaning chemicals
  - Cleaning Robots
  - Air purifiers
  - Filtering machines
  - Spill Absorbents
  - Termite treatment

#### **Teaching/Training Aids:**

- 1. Computer
- 2. LCD Projector
- 3. Projection Screen
- 4. White/Black Boards
- 5. Flip Charts
- 6. Video and audio recorders

#### **CAREER OPPORTUNITIES:**

Retail is the sector which provides huge career opportunities to all age group of people irrespective of qualification, gender, race and religion. Following career opportunities are available in this field. Students can make their career in any field based on their interest and suitability.

- Supply chain management
- Visual Merchandising
- Category Management
- > Store operation
- Mall Management
- Inventory Management

#### **VERTICAL MOBILITY:**

At BBA/B.Com level, students may start their career as a business executive and they can reach at managerial level over the period of time. For the career progression, following career options are available in retail field.

- Retail sales executive
- Visual merchandising executive
- Retail account executive
- Store operation executive
- Executive (Logistics and supply chain).
- Executive (Inventory management)

## **RETAIL (SUBJECT CODE – 401)**

## **CLASS – IX (SESSION 2024-2025)**

Total Marks: 100 (Theory-50 + Practical-50)

	UNITS	NO. OF HOURS for Theory and Practical 220	MAX. MARKS for Theory and Practical 100	
	Employability Skills			
<	Unit 1 : Communication Skills-I	13	2	
Part A	Unit 2 : Self-Management Skills-I	07	2	
<b>₽</b>	Unit 3 : ICT Skills-I	13	2	
	Unit 4: Entrepreneurial Skills-I	10	2	
	Unit 5 : Green Skills-I	07	2	
	Total	50	10	
	Subject Specific Skills			
	Unit 1: Introduction to Retail	25	00	
t B	Unit 2: Receiving and Storage of Goods	25	20	
Part	Unit 3: Stock Levels in Storage	25	20	
	Unit 4: Customer Service	20		
	Total	95	40	
	Practical Work			
	Project		10	
S	Viva		05	
Pari	Practical File	75	15	
	Demonstration of skill competencyvia Lab Activities		20	
	Total	75	50	
	GRAND TOTAL	220	100	

NOTE: Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

## DETAILED CURRICULUM/ TOPICS CLASS - IX

#### **Part-A: EMPLOYABILITY SKILLS**

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-I	13
2.	Unit 2: Self-management Skills-I	07
3.	Unit 3: Information and Communication Technology Skills-I	13
4.	Unit 4: Entrepreneurial Skills-I	10
5.	Unit 5: Green Skills-I	07
	TOTAL DURATION	50

• Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

#### Part B - SUBJECT SPECIFIC SKILLS Class IX

S. No.	Units	Duration in Hours
1.	Unit 1: Introduction to Retail	25
2.	Unit 2: Receiving and Storage of Goods	25
3.	Unit 3: Stock Levels in Storage	25
4.	Unit 4: Customer Service	20
	TOTAL DURATION	95

UNIT	SUB-UNIT	SESSION/ ACTIVITY/ PRACTICAL
1.Introduction to Retail	1. Basics of Retailing	Session: Observe the basic functions and requirements of retailers in the retail store.  • Meaning of retailing
		<ul> <li>Function and essential requirements of retailers</li> <li>Retailer's services to customers</li> </ul>
	Organised and     Unorganised     Retailing	Session: List the different formalities required for organised and unorganised retailing.
		Differences between organised and unorganised retail.
	3. Store and Non-store Retailing	Session: List the different formalities required for store and non-store retailing.
	retaining	<ul> <li>Meaning of store and non-store retailing</li> <li>Classification of store and non-store retailing</li> </ul>
		<ul> <li>Identify the various store retailing from the given retail Formats.</li> <li>Identify the various non-store given retail formats.</li> </ul>

	<b>4.</b> Indian and Global Retailers	Session: Meaning of Indian and global retailers
		<ul> <li>Major player of Indian and global retailers</li> <li>Differentiate between Indian and global retailers</li> </ul>
Receiving and	Classification of Goods	Session: Meaning of goods
Storage of Goods		<ul> <li>Types of consumer goods</li> <li>Give example of consumer and durable goods</li> </ul>
	2. Procedure for	Session: Describe the receiving procedure.
	Receiving and Dispatching Stock to Stores	<ul> <li>Dispatching stock to stores</li> <li>Refusal procedure of goods delivered</li> <li>List out the various check points while receiving goods</li> </ul>
	Storage of     Goods in Retail     Operations	Session: Meaning and need of storage of goods
	Operations	<ul><li>Techniques of storage of goods</li><li>Precautions for storage of goods</li></ul>
		Advantages of various storage techniques
		Recording procedure of goods received
	Process of     Goods Handling	Session: List steps in goods management process in a given situation.
		<ul> <li>Importance of goods handling</li> <li>Precautions to be taken while handling good</li> </ul>
		<ul> <li>Precautions to be taken write handling good</li> <li>Session: Operate various types of material handling equipments</li> <li>Name the types of material handling equipments.</li> <li>Factors affecting selection of equipments.</li> <li>Manage material handling services performed during retailing process.</li> </ul>
3. Stock Levels in Storage	Stock Levels in Retail Stores	Session: Meaning of stock level  Types of stock levels Need for managing stock level in retail
	2. Documents Required for Stock Handling	Session: Documents for stock receiving  Procedure for checking stock levels Reporting deviations

UNIT	SUB-UNIT	SESSION/ ACTIVITY/ PRACTICAL
	3. Reporting Storage Space	Session: Concept of floor plan     Allocation of space     Types of space     Shortage storage space
	4. Handling Equipment	Session: State various types of material handling equipment.  • Meaning of handling equipment  • Factors affecting selection of equipments.  • Types of handling equipment in retail store  • Functions of the handling equipment in retail store
4. Customer Service	1. Customer Needs and Service	Session: Explain customer needs and customer service.  Meaning of consumer and customer Basic needs of the customer at retail outlet Customer service concepts Role of customer service in retail Elements of customer services Advantages of customer service
	2. Effective Customer Service	Session: Describe effective customer service.  • Effective customer service • Dealing effectively with customer at retail outlet • Effective ways to build customers rapport
	3. Organization Standards	Session: Demonstrate the organization standards by appearance and behaviour.  Standard set for staff appearance Precautions taken by male and female staff Staff behaviour in organization Dealing with the customer Dealing with the superior Dealing with the colleague
	4. Customer Expectation	Session: Identify and confirm customer expectations

#### **PRACTICAL GUIDELINES FOR CLASS - IX**

#### **Assessment of performance:**

The two internal examiners assigned for the conduct and assessment of Practical Examinations each in **Secondary School Curriculum (Under NSQF).** Question for the viva examinations should be conducted by both the examiners. Question to be more of General nature, project work or the curriculum. Investigatory Project especially those that show considerable amount of effort and originality, on the part of the student, should get suitable high marks, while project of a routine or stereotyped nature should only receive MEDIOCRE marks.

#### Procedure for Record of Marks in the Practical answer-books:

The examiner will indicate separately marks of practical examination on the title page of the answerbooks under the following heads:-

#### **Project -10 marks**

Projects for the final practical is given below. Student may be assigned

#### Viva based on Project -05 marks

The teacher conducting the final practical examination may ask verbal questions related to the project, if any, done by the student. Alternatively, if no project has been assigned to the students, viva may be based on questions of practical nature from the field of subject as per the Curriculum

#### **Practical File -15 Marks**

Students to make a power point presentation / assignment / practical file / report. Instructor shall assign them any outlet to study the elements in retailing.

Suggested list of Practical –

- 1. Visit to a retail store and mention your observation on different functions of the retail store.
- 2. Visit your market and prepare list of at least five organized and unorganized retail formats giving reasons for each classification.
- 3. Visit of a retail store and to observe and report various types of material handling equipment deployed by the retailers.
- 4. Draw a chart on various staff appearance/dressing protocols deployed by the retailer.
- 5. Visit your market to identify, sort the detail outlet on basis of different products sold by them.

- 6. Visit your market to identify various exclusive outlet and multi-brand outlet given reasons of your choice in each case
- 7. Visit a local food and grocery retail outlet. Study the category of products this store offers on the basis of a) type of product b) brand c) kind of handling
- 8. Visit the nearby market. Identify and sort the outlets on the basis of different types of product being handled by each store

#### **Demonstration of skill competency in Lab Activities -20 marks**

#### **Guidelines for Project Preparation:**

The final project work should encompass chapters on:

- a) Introduction,
- b) Identification of core and advance issues,
- c) Learning and understanding and
- d) Observation during the project period.

Activity to be suggested by internal examiner, to be conducted on practical day. Suggestive activities can be-

- 1. Retail sales talk: student to be assigned a brand and asked to sell in 2-3 minutes.
- 2. Students to prepare poster on either of the following two topics and asked to present
  - a. Safe practices
  - b. Careers in Retailing

## CBSE | DEPARTMENT OF SKILL EDUCATION

### **CURRICULUM FOR SESSION 2024-2025**

## **RETAIL (SUBJECT CODE - 401)**

**JOB ROLE: STORE OPERATIONS ASSISTANT** 

#### CLASS - X

#### **COURSE OVERVIEW:**

A retailer is one who stocks the manufactured goods and is involved in the act of selling to the final customer or consumer, at a margin of profit. Retailing is the last link that connecting the individual consumer with the manufacturing and distribution chain. It adds value in terms of bulk breaking and providing a wide variety of goods and services to customers as per their needs.

The retail industry is divided into organised and unorganized sectors. Organised retailing refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the corporate- backed hypermarkets and retail chains, and also the privately owned large retail businesses. Unorganized retailing, on the other hand, refers to the traditional formats of low-cost retailing, like, the local kirana shops, owner manned general stores, paan/beedi shops, convenience stores, hand cart and pavement vendors, etc.

Organised retail can be categorized by the type of products retailed as well as the by the different kind of retail formats. The major retail formats include Department store, Supermarkets, Hypermarket, Specialist Stores, Convenience Stores, and Kiosks. The various operations involved in store operation and management include Store Operations, Back end operations, Merchandising, Logistics and Distribution, Marketing, Procurement/Purchase, and Corporate Services.

After completion of this course the learner would be able to work as store operations assistant in organised retailing and may look after overall store operations. He/she can also motivate other coworkers and who assist customers in finding merchandise, introduce customers to new merchandise, and move the goods from racks to billing counters. He also serves internal and external customers in a retail environment with respect to product receiving, movement, storage and delivery. He needs to be physically fit to withstand working in a retail environment whilst being customer responsive towards service delivery.

#### **OBJECTIVES OF THE COURSE:**

In this course, the students will be introduced to the fundamental concepts of Retail Management and the career opportunities available in this field. This course provides an insight to the students regarding various issues associated with store operation, visual merchandising, merchandising, inventory management, retail sales etc. Class participation would be fundamental for the development of transferrable skills.

Followings are the main objectives of this course.

- To familiarize the students regarding various dimensions of retail management and career opportunities available in these fields.
- To develop practical understanding among the students associated with retailing through classroom discussion/ participation and projects.
- To develop transferrable skills among the students for managing retail operation efficiently so that they could be ready to join the retail industry.
- To provide knowledge to students in concise and understandable format so that students could learn and apply these concepts in their career for the growth.
- To provide brief insight about floor operation, product display, product handling, inventory management and retail sales.

#### **SALIENT FEATURES:**

- Retailing involves direct interaction among buyers and sellers.
- Across the world, the number of retail outlet is more than any other forms of the business.
   India is known as nation of the shop as there are more than 13 million retail outlets in the country.
- Retail business primarily deals with B to C market rather than B to B market. In retailing, sales volume is comparatively large in quantity but lesser in monetary value.
- Location and lay out design of the store are critical success factor for the growth of the store.
- Retail is very localized business and it is in transition phase; mergers, acquisition among the retail firms are taking place across the globe.
- Retailers are developing new business format. On line retailers are growing at very high pace and it is impacting the business of traditional store.

#### **LIST OF EQUIPMENT AND MATERIALS:**

The list given below is suggestive and an exhaustive list should be prepared by the vocational teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

#### **Material Required for Store Operations Assistant:**

- 1. Shelves for Stacking Products
- 2. Shopping Cart
- 3. Signage Board Retail
- 4. Offer / Policy Signage
- 5. Big Poster (at POS) for offer related advertisement
- 6. Gondola
- 7. Products for display (Dummy Cameras and Mobiles)
- 8. Danglers
- 9. Coupons and Vouchers
- 10. Carry Bags
- 11. Physical Bill Copy
- 12. Bar Code Machine
- 13. Customer Feedback Form
- 14. Safety and security equipment's on site-
  - Fire extinguisher
  - Security cameras
  - LCD screens
  - Safety sign boards
  - Personal protective equipment's (PPE) like gloves, helmets, jackets, harness etc.
  - Locking systems
- 15. Housekeeping equipment's on site
  - Vacuum cleaner
  - Mops
  - Cleaning chemicals
  - Cleaning Robots
  - Air purifiers
  - Filtering machines
  - Spill Absorbents
  - Termite treatment

#### **Teaching/Training Aids:**

- 1. Computer
- 2. LCD Projector
- 3. Projection Screen
- 4. White/Black Boards
- 5. Flip Charts
- 6. Video and audio recorders

#### **CAREER OPPORTUNITIES:**

Retail is the sector which provides huge career opportunities to all age group of people irrespective of qualification, gender, race and religion. Following career opportunities are available in this field. Students can make their career in any field based on their interest and suitability.

- Supply chain management
- Visual Merchandising
- Category Management
- > Store operation
- Mall Management
- Inventory Management

#### **VERTICAL MOBILITY:**

At BBA/B.Com level, students may start their career as a business executive and they can reach at managerial level over the period of time. For the career progression, following career options are available in retail field.

- Retail sales executive
- Visual merchandising executive
- Retail account executive
- Store operation executive
- Executive (Logistics and supply chain).
- Executive (Inventory management)

## **RETAIL (SUBJECT CODE – 401)**

## CLASS – X (SESSION 2024-2025) Total Marks: 100 (Theory-50 + Practical-50)

	UNITS	NO. OF HOURS for Theory and Practical 220	MAX. MARKS for Theory and Practical 100
	Employability Skills		
	Unit 1 : Communication Skills-II	13	2
	Unit 2 : Self-Management Skills-II	07	2
4	Unit 3 : ICT Skills-II	13	2
Part	Unit 4 : Entrepreneurial Skills-II	10	2
۵	Unit 5 : Green Skills-II	07	2
	Total	50	10
	Subject Specific Skills		
	Unit 1 : Delivery of Goods	25	20
	Unit 2: Retail store operation	25	20
E B	Unit 3: Merchandise Planning	25	
Part	Unit 4: Security Operation and Housekeeping in Retail	20	20
	Total	95	40
	Practical Work		
	Viva		05
	Practical File	75	25
Part C	Demonstration of skill competency via Lab Activities	. 0	20
	Total	75	50
	GRAND TOTAL	220	100

# DETAILED CURRICULUM/ TOPICS CLASS - X

#### **Part-A: EMPLOYABILITY SKILLS**

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II	13
2.	Unit 2: Self-management Skills-II	07
3.	Unit 3: Information and Communication Technology Skills-II	13
4.	Unit 4: Entrepreneurial Skills-II	10
5.	Unit 5: Green Skills-II	07
	TOTAL DURATION	50

• Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

#### Part-B - SUBJECT SPECIFIC SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Delivery of Goods	25
2.	Unit 2: Retail store operation	25
3.	Unit 3: Merchandise Planning	25
4.	Unit 4: Security Operation and Housekeeping in Retail	20
	TOTAL DURATION	95

UNIT	SUB-UNIT	SESSION/ ACTIVITY/ PRACTICAL
1. Delivery Of goods	1. Billing Procedure	Session: Describes the basic understanding and Competencies for Billing Personnel  State various types of Billing and Accounting Heads  Understanding basic accounting Terminologies related with Billing Session: Handle the various modes of payment during the Billing process.  Describes various modes of payments.  State the precautions to be taken while handling the mode of payments.  Understanding use of various Equipment's used in Payment Process Activity: On the job to handle payments in Retail Organization.
	2. Elements of Transportations	<ul> <li>Session: Describe the various modes of transport</li> <li>Common modes of retail transport.</li> <li>Factors affecting modes of transport. Session: Identify objectives of loading and unloading</li> <li>Describe the objective of loading and unloading.</li> <li>Discuss the significance of loading and unloading.</li> <li>Activity: Make a brief report on loading and unloading.</li> <li>Session: Identify the problems associated to retail transport.</li> <li>Types of problems faced during transportation in retail.</li> <li>Solutions to overcome the problems in retail transportation.</li> </ul>
	3. Delivery Procedure	<ul> <li>Session: Understand the various delivery procedure for delivery of items.</li> <li>Describe various delivery procedures for delivery of goods in malls, grocery shops and web-based service.</li> <li>Session: State the delivery process of Grocery/Small shops.</li> <li>Identify the methods for packing, bagging and arranging for delivery in departmental stores and malls</li> <li>Session: Identify the delivery process of grocery/small shops.</li> <li>State the method for packing, labeling, marking and arranging for delivery.</li> <li>Process of home delivery.</li> <li>Activity: Role play on customer handling, packing, bagging and delivery of good</li> </ul>
	4. Laws of records maintenance*	Session: Identify the various records and maintenance followed in retail.  State the various records and maintenance used in organized retail sector Session: Understand the law of various records and maintenance  Law for record and maintenance method used in small shops/ grocery shops/small scale industry.

UNIT	SUB-UNIT	SESSION/ ACTIVITY/ PRACTICAL
2. Retail Store Operations	1. Store Layout	Session: Competences required for store operations in retail knowledge.  State whether the site is nearer to target market.  Describe the store area.  Describe the source of power and water supply.  State the component of store layout.  Session: Identify the formalities required for store layouts.  State the design and location of the store.  Steps involved in preparing store layout.  Steps involved in identifying of store locations. Session: Describe the location and proportion of space through numeric and visual space planning.  Planning a layout for the store interior.  Describe the allocation of space based on sales margin products and strategy.
	2. Store Design	Session: Describe the element if store planning and design.  Describe the elements (store design objectives selling space, merchandise space, employee space, customer space, display area, fixture arrangements etc.)  Session: Identify the tips for Retail store Design.  Store, frontage, signing, furniture, display, lighting. Decoration.  Tips for retail store design.
	3. Store Procedure	Session: Describe the competences of core areas in store procedures  • learn core areas like store exterior store interior customer service and merchandise management  Session: identify the competitive analysis of store promotion  • learn from advertising agency public relation form marketing specialist to promote the product through retail  Session: Identify the opening and closing session in retail store  • opening procedure in retail store closing procedure in retail store
	4 Store maintenance	<ul> <li>Session: Managing the operations and maintenance of the retail stores.</li> <li>cleanliness of store premises depends on the maintenance of the store till merchandising with the customer goes on Session: Manage the receipts of the products issued from the store</li> <li>product procurement and issues of product Activity: On job orientation of receipts and issues of products from the store.</li> </ul>

UNIT	SUB-UNIT	SESSION/ ACTIVITY/ PRACTICAL
3. Merchandise Planning	1. Kinds of merchandise	Session: Be acquainted with terms and concepts of merchandise  concept of merchandise  the functions of merchandise  planning of merchandising  Session: list out the rights and guidelines of merchandising  types of rights  tips of merchandising  Session: Identify the kinds of merchandise  Types of general merchandise
	2. Role and function of junior merchandise	Session: Identify the roles and functions of junior merchandise  Role of junior merchandise and their general function Describe the various merchandise presentation Session: apply the function of junior merchandiser at different level General function of merchandiser Functions of admiration merchandiser Basic duties of merchandiser Functions at different level Function of divisional merchandise manager
	3. Visual merchandising and display	<ul> <li>Session: Identify the basic aspects of visual merchandising</li> <li>Meaning of visual merchandising</li> <li>Aspects of visual merchandising</li> <li>Elements of visual merchandising</li> <li>Session: list out the functions, principles and techniques of visual merchandising</li> <li>Functions of visual merchandiser</li> <li>Principles of visual merchandising</li> <li>Techniques of visual merchandising</li> <li>Types of visual merchandising</li> <li>Activities: Visit in various merchandising stores for observation</li> </ul>
	4. Duties and responsibilities of junior merchandiser*	<ul> <li>Session: Describe the duties and responsibilities of the junior merchandiser</li> <li>Describe the various career opportunities in the retail Industry</li> <li>Describe the purpose of knowing job</li> <li>Describe the employee and employer rights and responsibilities in retail Industry</li> <li>Describe the duties of junior merchandiser in business Promotion.</li> <li>Session: Plan and prepare display of product</li> <li>Describe the purpose of display products</li> <li>Describe the standards that the display should meet.</li> <li>Activity: Visit to a retail store to understand how displays should conform to the Company's requirement and standard.</li> </ul>

UNIT	SUB-UNIT	SESSION/ ACTIVITY/ PRACTICAL
4. Security	1. Security points in	Session: Identify the various security points.
Operations and	retail store	Purpose of security point in retail store.
Housekeeping		State the locations of security points in retail store.
in Retail	2. Role and function	Session: Identify the roles and functions of security
	of security	personnel
	personnel	role of security in retail store
		functions of security in retail store
		Activity :group discussion on advancement in
		security functions in retail store
	3. Material handling	Session: Describing the competencies required for
	in housekeeping	material handling in housekeeping
		Describe the competencies and skills required for
		housekeeping
		Session :Examine the process of material handling
		Procedure to handle the material used in retail housekeeping
		Session: identify and operate housekeeping equipments
		in retail department stores
		the materials and equipments
		techniques of housekeeping practices and
		protection of material
		Activity : role play on responsibilities of
		housekeeping work
	4. Procedure in	Session: Identify the competencies required for
	housekeeping *	housekeeping in retail operations
	3	to describe housekeeping in retail outlets retail store
		and malls
		competencies required for housekeeping session
		applying housekeeping in the area of cleanliness
		hygiene safety disposal of waste
		competencies required in cleanliness hygiene waste
		disposal safety health hazards
		Activity: Visit to retail store and observe what kind of
		method is applied for housekeeping of retail store

#### **PRACTICAL GUIDELINES FOR CLASS - X**

#### **Assessment of performance:**

The two internal examiners assigned for the conduct and assessment of Practical Examinations each in **Secondary School Curriculum (Under NSQF).** Question for the viva examinations should be conducted by both the examiners. Question to be more of General nature, project work or the curriculum. Investigatory Project especially those that show considerable amount of effort and originality, on the part of the student, should get suitable high marks, while project of a routine or stereotyped nature should only receive MEDIOCRE marks.

#### Procedure for Record of Marks in the Practical answer-books:

The examiner will indicate separately marks of practical examination on the title page of the answerbooks under the following heads:-

#### Viva based on Project -05 marks

The teacher conducting the final practical examination may ask verbal questions related to the project, if any, done by the student. Alternatively, if no project has been assigned to the students, viva may be based on questions of practical nature from the field of subject as per the Curriculum

#### **Practical File - 25 Marks**

Students to make a PowerPoint presentation. Alternatively, if they can't be assigned a power point presentation then they can communicate their project work through practical file.

Suggested list of Projects -

- Identify and visit two local retail outlets. Study the differences in store layout of both and report.
- 2. Visit a retail outlet in a nearby mall or market and discuss the visual merchandising tools applied in the store
- 3. Visit to a Retail Store and make project on accounting procedures used by the retailers e.g., Khata Bahi or Billing process of a retail shop in a mall.
- 4. Visit to a retail store and to prepare the project on different activities involved in billing process in a store.
- 5. Modes of payment visit to retail store and make a project on different modes of the payments used by the retailer.
- 6. Visit to retail store and prepare the project on different steps involved in order to handle the payments.

- 7. Visit to retail store and make project on different modes of retail transportation.
- 8. Visit to a retail store and identify the various responsibilities performed by a retail store one individual/ multi brands.
- 9. Visit to a retail store and identify the various steps involved in distinguish lay out of a store.
- 10. Visit to a retail store and identify the various steps involved in various types of merchandizing threats and opportunities.
- 11. Visit to a retail store and identify various threats and opportunities of any one merchandize.
- 12. Visit to a retail store and make the list of security check points and show it on a chart/layout.
- 13. Visit to a retail store and prepare a project on different methods used for material handling by the retailer.

#### <u>Demonstration of skill competency in Lab Activities - 20 marks</u>

#### **Guidelines for Project Preparation:**

The final project work should encompass chapters on:

- a) Introduction,
- b) Identification of core and advance issues,
- c) Learning and understanding, and
- d) Observation during the project.

Activity question to be created by internal examiner, to be conducted on the practical day (30 minutes).

Suggestive activities can be-

- 1. Role Play
  - a. Barriers in retail communication
  - b. Retail selling skills

# CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2024-2025

## INFORMATION TECHNOLOGY (SUB. CODE – 402)

JOB ROLE: DOMESTIC DATA ENTRY OPERATOR

#### CLASS - IX

#### **COURSE OVERVIEW:**

A Data Entry Operator/Analyst is a person who is responsible for entering data into different applications and computer databases, manage and maintain effective record keeping. In addition, S/he is responsible for organizing files, collecting and managing data to be entered into the computer. S/he is also responsible for security of data and safeguard of the computer network.

With every office and organization seeking to become computerized, the demand for data entry operators/analysts is on a rise. Data entry operators/analysts usually work in an indoor, office setting using a computer and other electronic machines. To be in the profession of data entry/analysis, one has to have computer literacy, high typing speed, organization skills, concentration skills, communication skills and an ability to sit for long periods of time entering and computing data.

#### **OBJECTIVES OF THE COURSE:**

In this course, the students will be introduced to the fundamental concepts of digital documentation, digital spreadsheet, digital presentation, database management and internet security.

The following are the main objectives of this course:

- To familiarize the students with the world of IT and IT enabled services.
- To provide an in-depth training in use of data entry, internet and internet tools.
- To develop practical knowledge of digital documentation, spreadsheets and presentation.
- To enable the students to understand database management system and have updated knowledge about digital record keeping.

- To make the students capable of getting employment in Private Sector, Public Sector, Ministries, Courts, House of Parliament and State Legislative Assemblies.
- To develop the following skills:
  - Data Entry and Keyboarding skills
  - The concept of Digital Documentation
  - o The concept of Digital Presentation
  - The concept of Electronic Spreadsheet
  - The concept of Databases
  - o Internet Technologies

#### **SALIENT FEATURES**

To be a data entry operator/analyst, one requires a lot of hard work and practical hands-on experience. One should have an intensive knowledge of Office applications, computer operations, and knowledge of clerical, administrative techniques and data analysis. Along with this, as a data entry operator/analyst, you will be expected to have fast typing speed, accuracy, and efficiency to perform tasks.

As a data entry operator/analyst, one should improve their computer skills, numerical and literacy skills. These skills can help one expand into a new career path in the future.

#### **SCHEME OF UNITS**

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class IX opting for skill subject along with other education subjects. The unit-wise distribution of hours and marks for class IX is as follows:

### **INFORMATION TECHNOLOGY (SUBJECT CODE - 402)**

**CLASS - IX (Session 2024-2025)** 

Total Marks: 100 (Theory-50 + Practical-50)

	UNITS	for	F HOURS Theory Practical	MAX. MARKS for Theory and Practical
	Employability Skills			
	Unit 1 : Communication Skills-I	10		2
4	Unit 2 : Self-Management Skills-I		10	3
Part A	Unit 3 : ICT Skills-I		10	1
<u> </u>	Unit 4 : Entrepreneurial Skills-I		15	3
	Unit 5 : Green Skills-I		05	1
	Total		50	10
	Subject Specific Skills	Theory	Practical	Marks
E E	Unit 1: Introduction to IT- ITeS industry	2	4	4
Part	Unit 2: Data Entry & Keyboarding Skills	4	10	6
	Unit 3: Digital Documentation	10	26	10
	Unit 4:Electronic Spreadsheet	18	35	10
	Unit 5: Digital Presentation	10	31	10
	Total	44	106	40
ပ	Practical Work			
Part	Practical Examination			15
<u> </u>	Written Test			10
	Viva Voce			10
	Total			35
D	Project Work/ Field Visit			
Part D	Practical File/ Student Portfolio			10
<b>~</b>	Viva Voce			05
	Total			15
	GRAND TOTAL	2	200	100

#### **DETAILED CURRICULUM/TOPICS:**

#### Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-I	10
2.	Unit 2: Self-Management Skills-I	10
3.	Unit 3: Basic Information and Communication Technology Skills-I	10
4.	Unit 4: Entrepreneurial Skills-I	15
5.	Unit 5: Green Skills-I	05
	TOTAL	50

NOTE: Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

#### Part-B - SUBJECT SPECIFIC SKILLS

- Unit 1: Introduction to IT- ITeS industry
- Unit 2: Data Entry & Keyboarding Skills
- Unit 3: Digital Documentation
- Unit 4: Electronic Spreadsheet
- Unit 5: Digital Presentation

#### **UNIT 1: INTRODUCTION TO IT-ITeS INDUSTRY**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1	Appreciate the applications of IT	<ul> <li>Introduction to IT and ITeS, BPO services,</li> <li>BPM industry in India,</li> <li>Structure of the IT-BPM industry,</li> <li>Applications of IT in home computing, everyday life, library, workplace, education, entertainment, communication, business, science and engineering, banking, insurance, marketing, health care, IT in the government and public service</li> </ul>	Identify and list the various IT enabled services, Observe the application of IT in various areas.

#### **UNIT 2: DATA ENTRY AND KEYBOARDING SKILLS**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Use keyboard and mouse for data entry	<ul> <li>Keyboarding Skills,</li> <li>Types of keys on keyboard, Numeric keypad,</li> <li>Home keys, Guide keys,</li> <li>Typing and deleting text,</li> <li>Typing ergonomics,</li> <li>Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows,</li> <li>Pointing device – Mouse, Mouse operations.</li> </ul>	<ul> <li>Identify the keys and its use on the keyboard,</li> <li>Demonstrate to use various keys on the keyboard,</li> <li>Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard,</li> <li>Practice the correct typing ergonomics,</li> <li>Practice to place fingers on correct key in four different row of keyboard,</li> <li>Practice various mouse operations.</li> </ul>
2.	Use typing software	<ul> <li>Introduction to Rapid Typing Tutor,</li> <li>Touch typing technique,</li> <li>User interface of Typing Tutor,</li> <li>Typing text and interpret results,</li> <li>Working with lesson editor,</li> <li>Calculating typing speed,</li> <li>Typing rhythm.</li> </ul>	<ul> <li>Identify the user interface of</li> <li>typing tutor,</li> <li>Practice to type text in typing tutor software and interpret the results,</li> <li>Practice to work in lesson editor,</li> <li>Calculate the typing speed</li> <li>Practice to improve typing</li> <li>Using typing tutor software.</li> </ul>

#### **UNIT 3: DIGITAL DOCUMENTATION**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a document using a word processor	<ul> <li>Introduction to word processing,</li> <li>Word processing applications,</li> <li>Introduction to Word Processing tool</li> <li>Creating a document, Parts of a Word Processor Window,</li> </ul>	<ul> <li>List the available word processing applications.</li> <li>Introduce with the parts of the main window.</li> <li>Change document views.</li> <li>Start a new document.</li> <li>Open an existing document.</li> <li>Save a document.</li> <li>Close a document.</li> </ul>
2.	Apply Editing features	<ul> <li>Text editing – Undo and Redo,</li> <li>Moving and copying text,</li> <li>Copy and Paste,</li> <li>Selecting text,</li> <li>Selection criteria,</li> </ul>	<ul> <li>Editing of text in a document</li> <li>Demonstrate to use undo and redo option,</li> <li>Use the keyboard and mouse options to select, cut, copy, paste, and move text.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
		<ul> <li>Selecting non-consecutive text items,</li> <li>Selecting a vertical block of</li> <li>text,</li> <li>Find and replace option,</li> <li>Jumping to the page number,</li> <li>Non-printing characters,</li> <li>Checking spelling and grammar,</li> <li>Using Synonyms and Thesaurus.</li> </ul>	<ul> <li>Demonstrate to select nonconsecutive text items, vertical block of text,</li> <li>Search and replace text in a document.</li> <li>Jump to the given page number in a document,</li> <li>Insert non-printing characters in a document,</li> <li>Apply Spelling and grammar option of document.</li> <li>Demonstrate to use Synonyms and Thesaurus.</li> </ul>
3.	Apply formatting features	<ul> <li>Page style dialog</li> <li>Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript</li> <li>Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph.</li> <li>Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers,</li> <li>Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image.</li> </ul>	<ul> <li>Apply various text formatting options for the text,</li> <li>Demonstrate to format paragraphs – indent/align paragraphs, assign font colour, highlighting, and background colour,</li> <li>Assign number or bullets to the lists items</li> <li>Demonstrate to assign colour, border and background to paragraph</li> <li>Demonstrate the page formatting – set up basic page layout using styles,</li> <li>Insert page break, Create header/footer and page numbers</li> <li>Define borders and backgrounds</li> <li>Insert images, shapes, special characters in a document</li> </ul>
4.	Create and work with tables	<ul> <li>Creating table in Word Processor</li> <li>Inserting row and column in a table</li> <li>Deleting rows and columns</li> <li>Splitting and merging tables</li> <li>Deleting a table</li> <li>Copying a table</li> <li>Moving a table.</li> </ul>	<ul> <li>Demonstrate and do the following in Word Processor:</li> <li>Create table,</li> <li>Insert and delete rows and column in a table,</li> <li>Split and merge tables,</li> <li>Delete a table,</li> <li>Copy or move from one location to another location of document.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Use Print Options	<ul> <li>Printing options in Word Processor.</li> <li>Print preview,</li> <li>Controlling printing,</li> <li>Printing all pages, single and multiple pages.</li> </ul>	<ul> <li>Demonstrate to print the document, selected pages in the document</li> <li>Print the document with various options,</li> <li>Preview pages before printing.</li> </ul>
6.	Understand and apply mail merge	Introduction to mail merge     Concept of data source for mail merge.	<ul> <li>Demonstrate to print the letters using mail merge,</li> <li>Do the following to achieve</li> <li>Create a main document,</li> <li>Create the data source,</li> <li>Enter data in the fields,</li> <li>Merge the data source with main document,</li> <li>Edit individual document,</li> <li>Print the merged letter,</li> <li>Save the merged letter.</li> </ul>

### **UNIT 4: ELECTRONIC SPREADSHEET**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Create a Spreadsheet	<ul> <li>Introduction to spreadsheet application</li> <li>Starting a spreadsheet</li> <li>Parts of a spreadsheet</li> <li>Worksheet – Rows and Columns, Cell and Cell Address,</li> <li>Range of cells – column range, row range, row and column range.</li> </ul>	<ul> <li>Start the spreadsheet,</li> <li>Identify the parts of Calc,</li> <li>Identify the rows number, column number, cell address,</li> <li>Define the range of cell,</li> <li>Identify row range, column range, row &amp; column range</li> </ul>
2.	Apply formula and functions in spreadsheet	<ul> <li>Different types of data,</li> <li>Entering data – Label, Values, Formula</li> <li>Formula, how to enter formula,</li> <li>Mathematical operators used in formulae,</li> <li>Simple calculations using values and operators,</li> <li>Formulae with cell addresses and operators,</li> <li>Commonly used basic functions in a spreadsheet – SUM, AVERAGE, MAX, MIN, Count</li> <li>Use of functions to do calculations.</li> </ul>	<ul> <li>Demonstrate to enter the text, numeric data in a cell,</li> <li>Identify the label, values and formula in the cell,</li> <li>Demonstrate to enter formula in a cell,</li> <li>Construct the formula using mathematical operators,</li> <li>Identify formulae with cell addresses and operators,</li> <li>Identify the correct syntax of formula,</li> <li>Use the basic functions to perform calculations on data.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Format data in the spreadsheet	<ul> <li>Formatting tool,</li> <li>Use of dialog boxes to format values,</li> <li>Formatting a range of cells with</li> </ul>	<ul> <li>Identify the formatting tool,</li> <li>Demonstrate to use of dialog boxes to format values,</li> <li>Demonstrate to format range of</li> </ul>
		decimal places,  • Formatting a range of cells to be seen as labels,	cells with decimal places,  • Demonstrate to format a range of cells to labels,
		<ul> <li>Formatting of a cell range as scientific,</li> </ul>	Demonstrate to format of a cell range as scientific,
		<ul> <li>Formatting a range of cells to display times,</li> </ul>	Demonstrate to format a range of cells to display time,
		<ul> <li>Formatting alignment of a cell range,</li> </ul>	Demonstrate to align cell data range,
		Speeding up data entry using the fill handle,	<ul><li>Demonstrate to create</li><li>number series using fill handle,</li></ul>
		<ul> <li>Uses of fill handle to copy formulae.</li> </ul>	<ul> <li>Copy formula by dragging the formula using fill handle.</li> </ul>
4.	Understand and apply Referencing	<ul><li>Concept of referencing,</li><li>Relative referencing,</li><li>Mixed referencing,</li><li>Absolute referencing.</li></ul>	<ul> <li>Demonstrate to use Relative referencing in spreadsheet,</li> <li>Demonstrate to use Mixed referencing in spreadsheet,</li> <li>Demonstrate to use Absolute referencing in spreadsheet.</li> </ul>
5.	Create and insert different types of charts in a spreadsheet	<ul><li>Importance of chart in spreadsheet</li><li>Types of chart</li></ul>	<ul> <li>Create different types of charts supported by a spreadsheet,</li> <li>Illustrate the example of chart in a spreadsheet.</li> </ul>

#### **UNIT 5: DIGITAL PRESENTATION**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Understand features of an effective presentation	<ul> <li>Concept of presentation,</li> <li>Elements of presentation,</li> <li>Characteristics of an effective presentation</li> </ul>	<ul> <li>Identify and list the elements of presentation,</li> <li>List the characteristics of an effective presentation.</li> </ul>
2.	Create a presentation	<ul> <li>Introduction to presentation software,</li> <li>Opening a presentation software</li> <li>Parts of presentation window,</li> <li>Closing a presentation</li> <li>Creating a presentation using template,</li> <li>Selecting slide layout,</li> <li>Saving a presentation,</li> <li>Running a slide show,</li> <li>Save a presentation in PDF,</li> <li>Closing a presentation,</li> <li>Using Help.</li> </ul>	<ul> <li>Start the presentation application</li> <li>various components of main Impress window</li> <li>Observe the different workspace views.</li> <li>Create a new presentation using wizard.</li> <li>Run the presentation,</li> <li>Save the presentation,</li> <li>Close the presentation,</li> <li>Demonstrate to use Help in presentation.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Work with slides	<ul> <li>Inserting a duplicate slide,</li> <li>Inserting new slides,</li> <li>Slide layout,</li> <li>Copying and moving slides,</li> <li>Deleting and renaming slides</li> <li>Copying, moving and deleting contents of slide,</li> <li>View a presentation,</li> <li>Controlling the size of the view,</li> <li>Workspace views – Normal, Outline, Notes, Slide sorter view.</li> </ul>	<ul> <li>Demonstrate to insert a new slide and duplicate slide in a presentation,</li> <li>Change the slide layout,</li> <li>Demonstrate to copy and move slides in the presentation,</li> <li>Demonstrate to copy, move and delete contents of the slide,</li> <li>Demonstrate to view a presentation in different views.</li> </ul>
4.	Format text and apply animations	<ul> <li>Formatting toolbar,</li> <li>Various formatting features,</li> <li>Text alignment,</li> <li>Bullets and numbering.</li> <li>Custom Animation</li> </ul>	<ul> <li>Identify and list the various options in formatting toolbar,</li> <li>Apply the appropriate formatting option</li> <li>Align the text in presentation,</li> <li>Apply bullets and numbering to the list items in presentation. □</li> <li>Apply Animation</li> </ul>
5.	Create and use tables	<ul> <li>Inserting tables in presentation,</li> <li>Entering and editing data in a table,</li> <li>Selecting a cell, row, column, table,</li> <li>Adjusting column width and row height,</li> <li>Table borders and background</li> </ul>	<ul> <li>Demonstrate the following:</li> <li>Insert table in presentation,</li> <li>Enter and edit data in a table,</li> <li>Select a cell, row, column, table,</li> <li>Adjust column width and row height,</li> <li>Assign table borders and background.</li> </ul>
6.	Insert and format image in presentation	<ul> <li>Inserting an image from a file,</li> <li>Inserting an image from the gallery,</li> <li>Formatting images,</li> <li>Moving images,</li> <li>Resizing images,</li> <li>Rotating images,</li> <li>Formatting using the Image toolbar,</li> <li>Drawing graphic objects – line, shapes,</li> <li>Grouping and un-grouping objects</li> </ul>	<ul> <li>Demonstrate to insert an image from file, gallery in presentation,</li> <li>Apply formatting options to image in presentation,</li> <li>Demonstrate to move, resize and rotate images,</li> <li>Apply formatting options of Image toolbar,</li> <li>Drawing line, shapes using graphic objects,</li> <li>Demonstrate to group and ungroup objects.</li> </ul>
7.	Work with slide master	<ul> <li>Slide masters,</li> <li>Creating the slide masters,</li> <li>Applying the slide masters to all slide,</li> <li>Adding transitions.</li> </ul>	<ul> <li>Create the slide masters,</li> <li>Apply the slide masters to the</li> <li>presentation,</li> <li>Add transitions to presentation.</li> </ul>

#### LIST OF EQUIPMENT/ MATERIALS:

The list given below is suggestive and an exhaustive list should be compiled by the teacher(s) teaching the subject. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

S. No.	ITEM NAME, DESCRIPTION & SPECIFICATION	QUANTITY
Α	HARDWARE	
1.	Computer with latest configuration or minimum Pentium Processor with minimum 2GB RAM, 512 GB HDD, 17" LED Monitor, NIC Card, 3 button Mouse, 105 keys key board and built-in speakers and mic.	15
2.	Laser Printer - Black	01
3.	Inkjet Printers (Colour & Black)	01
4.	Scanner	01
5.	Online UPS 5 KVA	01
6.	16 Port Switches	01
7.	Air Conditioner 1.5 tonne	02
8.	Telephone line (For Internet)	01
9.	Fire extinguisher	01
В	SOFTWARE	
1.	Operating System Linux and Windows	
2.	Anti-Virus Latest version	
3.	Productivity Suite, Example –Libre Office	
С	FURNITURE	
1.	Class room chairs and desks	25
2.	Computer Tables	15
3.	Straight back revolving & adjustable chairs (Computer Chairs)	15
4.	Printer Tables	02
5.	Trainers Table	01
6.	Trainers Chair	01
7.	Steel cupboards drawer type	02
8.	Cabinet with drawer	01
9.	Steel Almira - big size	01
10.	Steel Almira- small size	01

#### **TEACHER'S/ TRAINER'S QUALIFICATIONS:**

Qualification and other requirements for appointment of teachers/trainers for teaching this subject, on contractual basis should be decided by the State/ UT. The suggestive qualifications and minimum competencies for the teacher should be as follows:

Qualification	Minimum Competencies	Age Limit
Diploma in Computer Science/	<ul> <li>The candidate should</li> </ul>	• 18-37 years (as on
Information Technology	have a minimum of 1	Jan. 01 (year))
OR	year of work experience	
Bachelor Degree in Computer	in the same job role.	<ul> <li>Age relaxation to</li> </ul>
Application/ Science/ Information		be provided as per
Technology (BCA, B.Sc. Computer	<ul> <li>S/he should be able to</li> </ul>	Govt. rules
Science/ Information	communicate in English	
Technology)	and local language.	
OR		
Graduate with PGDCA OR DOEACC	<ul> <li>S/he should have</li> </ul>	
A Level Certificate.	knowledge of	
The suggested qualification is the	equipment, tools,	
minimum criteria. However higher	material, Safety, Health	
qualifications will also be acceptable.	& Hygiene.	

Teachers/Trainers form the backbone of Skill (Vocational) Education being imparted as an integral part of Rashtriya Madhyamik Shiksha *Abhiyan* (RMSA). They are directly involved in teaching of Skill (vocational) subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Teachers/ Trainers, Educational Qualifications, Industry Experience, and Certification/ Accreditation.

The State may engage Teachers/Trainers in schools approved under the component of scheme of Vocationalisation of Secondary and Higher Secondary Education under RMSA in following ways:

(i) Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC).

#### OR

(ii) Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF\*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organizations involved in education and training must meet in order to be accredited by competent bodies to provide government- funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.

The educational qualifications required for being a Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers/ trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Teachers/Trainers, the State should ensure that a standardized procedure for selection of (Vocational) Teachers/Trainers is followed. The selection procedure should consist of the following:

- (i) Written test for the technical/domain specific knowledge related to the sector;
- (ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and (iii) Practical test/mock test in classroom/workshop/laboratory.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Teachers/ Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

The Head Master/Principal of the school where the scheme is being implemented should facilitate and ensure that the (Vocational) Teachers/Trainers:

- Prepare session plans and deliver sessions which have a clear and relevant purpose and which engage the students;
- Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- Make effective use of learning aids and ICT tools during the classroom sessions;
- Engage students in learning activities, which include a mix of different methodologies, such as project based work, team work, practical and simulation based learning experiences;
- Work with the institution's management to organise skill demonstrations, site visits, on job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- Identify the weaknesses of students and assist them in up-gradation of competency;
- Cater to different learning styles and level of ability of students;
- Assess the learning needs and abilities, when working with students with different abilities
- Identify any additional support the student may need and help to make special arrangements for that support;
- · Provide placement assistance

Assessment and evaluation of (Vocational) Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the (Vocational) Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the (Vocational) Teachers/Trainers.

Following parameters may be considered during the appraisal process:

- Participation in guidance and counseling activities conducted at Institutional, District and State level:
- Adoption of innovative teaching and training methods:
- Improvement in result of vocational students of Class X or Class XII;
- Continuous up-gradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
- Membership of professional society at District, State, Regional, National and International level;
- Development of teaching-learning materials in the subject area;
- Efforts made in developing linkages with the Industry/Establishments;
- Efforts made towards involving the local community in Vocational Education
- Publication of papers in National and International Journals;
- · Organization of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.

# CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2024-2025

### **INFORMATION TECHNOLOGY (SUB. CODE – 402)**

JOB ROLE: DOMESTIC DATA ENTRY OPERATOR

#### CLASS - X

#### **COURSE TITLE: DOMESTIC DATA ENTRY OPERATOR**

Domestic Data Entry Operator in the IT-ITeS Industry is also known as Data Entry Operator. Individuals are responsible to provide daily work reports and work on daily hour basic. The individual is responsible for electronic entry of data from the client side to the office site or viceversa. Individual tasks vary depending on the size and structure of the organization. This job requires the individual to have a thorough knowledge of various technology trends and processes as well as have updated knowledge about database management systems and IT initiatives. The individual should have fast and accurate typing/data encoding. This job involves working in a personal computer, and appropriate software to enter accurate data regarding different issues like retrieving data from a computer or to a computer

#### **COURSE OUTCOME:**

On completion of the course, students should be able to:

- Apply effective oral and written communication skills to interact with people and customers;
- Identify the principal components of a computer system; Demonstrate the basic skills of using computer;
- Demonstrate self-management skills;
- Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities:
- Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;
- Work safely on the computer.
- Start the computer.
- · Open and use the related software.
- Exit from the software.
- Shut down the computer.
- Use the computer for data entry process.
- Collect all necessary information about the query.
- Log any decision about the guery on the data entry tracking form.
- Follow Rules and guidelines for data entry.
- · Handle queries.
- Undertake data entry with speed and accuracy.
- Identify and control hazards in the workplace that pose a danger or threat to their safety or health, or that of others.

#### **COURSE OBJECTIVES:**

In this course, the students will be introduced to the fundamental concepts of digital documentation, digital spreadsheet, digital presentation, database management and internet security.

The following are the main objectives of this course:

- To familiarize the students with the world of IT and IT enabled services.
- To provide in-depth training in use of data entry, internet and internet tools.
- To develop practical knowledge of digital documentation, spreadsheets and presentation.
- To enable the students to understand database management systems and have updated knowledge about digital record keeping.
- To make the students capable of getting employment in Private Sector, Public Sector,
   Ministries, Courts, House of Parliament and State Legislative Assemblies.
- To develop the following skills:
  - Data Entry and Keyboarding skills
  - The concept of Digital Documentation
  - The concept of Digital Presentation
  - o The concept of Electronic Spreadsheet
  - The concept of Databases
  - Internet Technologies

#### **SALIENT FEATURES:**

To be a data entry operator/analyst, one requires a lot of hard work and practical hands-on experience. One should have an intensive knowledge of Office applications, computer operations, and knowledge of clerical, administrative techniques and data analysis. Along with this, as a data entry operator/analyst, you will be expected to have high typing speed, accuracy and efficiency to perform tasks.

As a data entry operator/analyst, one should improve their computer skills, numerical and literacy skills. These skills can help one expand into a new career path in the future.

#### **SCHEME OF UNITS**

Total Marks: 100 (Theory-50+Practical-50)

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class X opting for skill subject along with other subjects.

The unit-wise distribution of hours and marks for class X is as follows:

## **INFORMATION TECHNOLOGY (SUBJECT CODE - 402)**

**CLASS - X (Session 2024-2025)** 

	UNITS	for Th	F HOURS neory and actical	MAX. MARKS for Theory and Practical
	Employability Skills			
	Unit 1: Communication Skills-II		10	2
⋖	Unit 2: Self-Management Skills-II		10	3
Part	Unit 3: ICT Skills-II		10	1
g	Unit 4: Entrepreneurial Skills-II		15	3
	Unit 5: Green Skills-II		05	1
	Total		50	10
	SUBJECT SPECIFIC SKILLS	Theory	Practical	Marks
B	Unit 1: Digital Documentation (Advanced)	12	18	8
	Unit 2: Electronic Spreadsheet (Advanced)	15	23	10
Z.	Unit 3: Database Management System	18	27	12
Part	Unit 4: Maintain Health, Safety and Secure Working Environment	15	22	10
	Total	60	90	40
	PRACTICAL WORK			
	Practical Examination			
C	Advanced Documentation	5 Marks		20
	Advanced Spreadsheets	5 Marks		
٦	Databases	10 Marks		
Part	Viva Voce	10 Marks		10
	Total			30
Part D	PROJECT WORK/FIELD VISIT  Any Interdisciplinary Real World Case Study to be taken. Summarized data reports of same can be presented in base. Input should be taken using forms and output should be done using reports using base. Documentation of the case study should be presented using writer.			10
Pa	PORTFOLIO/ PRACTICAL FILE: (Portfolio should contain printouts of the practical done using Writer, Calc and Base with minimum 5 problems of each)  Total			10 <b>20</b>
	GRAND TOTAL		200	100

#### **DETAILED CURRICULUM/ TOPICS:**

#### Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II	10
2.	Unit 2: Self-management Skills-II	10
3.	Unit 3: Information and Communication Technology Skills-II	10
4.	Unit 4: Entrepreneurial Skills-II	15
5.	Unit 5: Green Skills-II	05
	TOTAL	50

Note: The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

#### Part-B - SUBJECT SPECIFIC SKILLS

- Unit 1: Digital Documentation (Advanced)
- Unit 2: Electronic Spreadsheet (Advanced)
- Unit 3: Database Management System
- Unit 4: Web Applications and Security

#### **UNIT 1: DIGITAL DOCUMENTATION (ADVANCED)**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	ApplyStyles in the document	<ul> <li>Styles/ categories in Writer</li> <li>Styles and Formatting window</li> <li>Using Fill Format.</li> <li>Creating and updating new style from selection</li> <li>Load style from template or another document.</li> <li>Creating a new style using drag-and-drop.</li> <li>Applying styles.</li> </ul>	<ul> <li>List style categories in Writer. Select the style from the Styles and Formatting window.</li> <li>Use Fill Format to apply a style to many different areas quickly.</li> <li>Create and update a new style from a selection.</li> <li>Load a style from a template or another document.</li> <li>Create a new style using drag-and drop.</li> </ul>
2.	Insert and use images in document	<ul> <li>Options to insert image to document from various sources.</li> <li>Options to modify, resize, crop and delete an image.</li> <li>Creating drawing objects, setting or changing its properties. Resizing and grouping drawing objects.</li> <li>Positioning image in the text.</li> </ul>	<ul> <li>Insert an image to document from various sources.</li> <li>Modify, resize, crop and delete an image.</li> <li>Create drawing objects</li> <li>Set or change the properties of a drawing object</li> <li>Resize and group drawing objects</li> <li>Position the image in the text</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Create and use template	<ul> <li>Templates in Writer.</li> <li>Using predefined templates.</li> <li>Creating a template.</li> <li>Set up a custom template.</li> <li>Using a template</li> <li>Changing to a different template.</li> <li>Updating a Document</li> </ul>	<ul> <li>Create a template.</li> <li>Use predefined templates.</li> <li>Set up a custom default template.</li> <li>Update a document.</li> <li>Change to a different template.</li> <li>Use the Template.</li> <li>Update the document.</li> </ul>
4.	Create table of contents	<ul> <li>Table of contents. Hierarchy of headings. Customization of table of contents.</li> <li>Character styles. Maintaining a table of contents.</li> </ul>	<ul> <li>Create a table of contents.</li> <li>Definea hierarchy of headings.</li> <li>Customize a table of contents.</li> <li>Apply character styles.</li> <li>Maintain atable of contents.</li> </ul>

#### **UNIT 2: ELECTRONIC SPREADSHEET (ADVANCED)**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Analyse data using scenarios and goal	<ul> <li>Using consolidating data.</li> <li>Creating subtotals.</li> </ul>	<ul><li>Use consolidating data</li><li>Create subtotals</li></ul>
	seek.	<ul> <li>Using "what if" scenarios. Using "what if" tools</li> </ul>	<ul> <li>Use "what if" scenarios Use "what if" tools</li> </ul>
		<ul> <li>Using goal seek and solver.</li> </ul>	<ul> <li>Use goal seek and solver</li> </ul>
2.	Link spreadsheets data	<ul> <li>Setting up multiple sheets.         Creating reference to other sheets by using keyboard and mouse.     </li> <li>Creating reference to another</li> </ul>	<ul> <li>Setup multiple sheets by inserting new sheets.</li> <li>Create reference to other sheets by using keyboard and mouse.</li> <li>Create references to other</li> </ul>
		document by using keyboard and mouse.	documents by using keyboard and mouse.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
		<ul> <li>Relative and absolute hyperlinks</li> <li>Hyperlinks to the sheet.</li> <li>Linking to external data.</li> <li>Linking to registered data sources.</li> </ul>	<ul> <li>Create, Edit and Remove hyperlinks to the sheet.</li> <li>Link to external data.</li> <li>Link to registered data source.</li> </ul>
spr 4. Us	e Macros in readsheet	<ul> <li>Setting up a spreadsheet for sharing.</li> <li>Opening and saving a shared spreadsheet.</li> <li>Recording changes.</li> <li>Add, Edit and Format the comments.</li> <li>Reviewing changes – view, accept or reject changes.  Merging and comparing.</li> <li>Using the macro recorder.</li> <li>Creating a simple macro.</li> <li>Using a macro as a function.</li> <li>Passing arguments to amacro.</li> <li>Passing the arguments as values.</li> <li>Macros to work like built-in functions.</li> <li>Accessing cells directly.</li> <li>Sorting the columns using macro.</li> </ul>	<ul> <li>Set up a spreadsheet for sharing.</li> <li>Open and save a shared spreadsheet.</li> <li>Record changes.</li> <li>Add, Edit and Format the comments.</li> <li>Review changes – view, accept or reject changes.</li> <li>Merge and compare sheets.</li> <li>Demonstrate the use of a macro recorder.</li> <li>Create a simple macro.</li> <li>Use a macro</li> <li>Pass arguments to a macro</li> <li>Pass the arguments as values</li> <li>Write the macros that act like built – in functions</li> <li>Access cells directly</li> <li>Sort the columns using macro.</li> </ul>

#### **UNIT 3: DATABASE MANAGEMENT SYSTEM**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Appreciate the concept of Database Management System	<ul> <li>Concept and examples of data and information,</li> <li>Concept of database,</li> <li>Advantages of database,</li> <li>Features of database,</li> <li>Concept and examples of Relational database,</li> <li>Concept and examples of field, record, table, database,</li> <li>Concept and examples of Primary key, composite primary key, foreign key,</li> <li>Database management system (DBMS) software</li> </ul>	<ul> <li>Identify the data and information,</li> <li>Identify the field, record, table in the database,</li> <li>Prepare the sample table with some standard fields.</li> <li>Assign the primary key to the field,</li> <li>Identify the primary key, composite primary key, foreign key.</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
		Relational Data base management system (RDBMS) software.	
2.	Create and edit tables using wizard and SQL commands	<ul> <li>Introduction to LibreOffice         Base</li> <li>Database objects – tables,         queries, forms, and reports of         the database,</li> <li>Terms in database – table, field,         record,</li> <li>Steps to create a table using         table wizard</li> <li>Data types in database.,</li> <li>Option to set primary key Table         Data View dialog box</li> </ul>	<ul> <li>Start the Libre Office Base and observe the parts of mainwindow,</li> <li>Identify the data base objects</li> <li>Create the sample table in any category using wizard,</li> <li>Practice to create different tables from the available list and choosing fields from the available fields.</li> <li>Assign data types of fields, Setprimary key,</li> <li>Edit the table in design view, Enter the data in the fields.</li> </ul>
3.	Perform operations on table	<ul> <li>Inserting data in the table,</li> <li>Editing records in the table,</li> <li>Deleting records from the table,</li> <li>Sorting data in the table,</li> <li>Referential integrity,</li> <li>Creating and editing relationships – one to one, one to many, many to many</li> <li>Field properties</li> </ul>	<ul> <li>Demonstrate to:</li> <li>Insert data in the table,</li> <li>Edit records in the table,</li> <li>Delete records from table,</li> <li>Sort data in the table,</li> <li>Create and edit relationships</li> <li>one to one, one to many,many to many,</li> <li>Enter various field properties.</li> </ul>
4.	Retrieve data using query	<ul> <li>Database query,</li> <li>Defining query,</li> <li>Query creation using wizard,</li> <li>Creation of query using design view,</li> <li>Editing a query,</li> <li>Applying criteria in query – single field, multiple fields, using wildcard,</li> <li>Performing calculations,</li> <li>Grouping of data,</li> <li>Structured Query Language (SQL).</li> </ul>	<ul> <li>Prepare a query for given criteria,</li> <li>Demonstrate to create query using wizard, and using design view,</li> <li>Edit a query,</li> <li>Demonstrate to apply various criteria in query – single field, multiple fields, using wild card,</li> <li>Performing calculations using query in Base,</li> <li>Demonstrate to group data,</li> <li>Use basic SQL commands,</li> </ul>

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
5.	Create Forms and Reports using wizard	<ul> <li>Forms in BASE.</li> <li>Creating form using wizard,</li> <li>Steps to create form using Form Wizard,</li> <li>Options to enter or remove data from forms</li> <li>Modifying form,</li> <li>Changing label, background,</li> <li>Searching record using Form,</li> <li>Inserting and deleting record using Form,</li> <li>Concept of Report in Base,</li> <li>Creating Report using wizard,</li> <li>Steps to create a Report using Wizard.</li> </ul>	<ul> <li>Illustrate the various steps to create Form using Form Wizard,</li> <li>Enter or remove data from Forms,</li> <li>Demonstrate to modify Forms,</li> <li>Demonstrate to change label, background,</li> <li>Search record using Form,</li> <li>Insert and delete record using Form View,</li> <li>Illustrate the various steps to create Report using Report Wizard,</li> <li>Demonstrate various examples of Report.</li> </ul>

#### **UNIT 4: MANAGING HEALTH AND SAFETY**

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
1.	Maintain workplace safety	<ul> <li>Basic safety rules to follow at workplace – Fire safety,</li> <li>Falls and slips, Electrical safety, Use of first aid.</li> <li>Case Studies of hazardous situations.</li> </ul>	<ul> <li>Practice to follow basic safety rules at workplace to prevent accidents and protect workers         <ul> <li>Fire safety,</li> </ul> </li> <li>Falls and slips, Electrical safety, Use of first aid.</li> </ul>
2	Prevent Accidents and Emergencies	<ul> <li>Accidents and emergency,</li> <li>Types of Accidents,</li> <li>Handling Accidents</li> <li>Types of Emergencies.</li> </ul>	<ul> <li>Illustrate to handle accidents at workplace,</li> <li>Demonstrate to follow evacuation plan and procedure in case of an emergency.</li> </ul>
3.	Protect Health and Safety at work	<ul> <li>Hazards and sources of hazards,</li> <li>General evacuation procedures,</li> <li>Healthy living.</li> </ul>	<ul> <li>Identify hazards and sources of hazards,</li> <li>identify the problems at workplace that could cause accidents,</li> <li>Practice the general evacuation procedures in case of an emergency.</li> </ul>

#### **ORGANISATION OF FIELD VISITS:**

In a year, at least 3 field visits/educational tours should be organised for the students to expose them to the activities in the workplace.

Visit a data entry centre and observe the following: Location, Site, Office building, Computer Systems, Tools and Equipment, Printer, Scanner. During the visit, students should obtain the following information from the owner or the supervisor of the Data Centre:

- 1. Data Entry Centre.
- 2. Computer Infrastructure.
- 3. Sitting Posture of data entry operators.
- 4. Assistive technology.
- 5. Man power engaged.
- 6. Total expenditure of Data Entry Centre.
- 7. Total annual income.
- 8. Profit/Loss (Annual).
- 9. Any other information.

#### **LIST OF EQUIPMENT/ MATERIALS:**

The list given below is suggestive and an exhaustive list should be compiled from the feedback given by various by the teachers teaching the subject. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

S. No.	ITEM NAME, DESCRIPTION & SPECIFICATION	QUANTITY
Α	HARDWARE	<u> </u>
1.	Computer with latest configuration or minimum Pentium Processor with minimum 2GB RAM, 512 GB HDD, 17" LED Monitor, NIC Card, 3 button Mouse, 105 keys key board and built-in speakers and mic.	15
2.	Laser Printer - Black	01
3.	Inkjet Printers (Colour and Black & White)	01
4.	Scanner	01
5.	Online UPS 5 KVA	01
6.	16 Port Switches	01
7.	Air Conditioner 1.5 tonne	02
8.	Telephone line (For Internet)	01
9.	Fire extinguisher	01
В	SOFTWARE	
1.	Operating System Linux and Windows	
2.	Anti-Virus Latest version	
3.	Productivity Suite, Example – LibreOffice, etc.	
С	FURNITURE	
1.	Class room chairs and desks	25
2.	Computer Tables	15
3.	Straight back revolving & adjustable chairs (Computer Chairs)	15
4.	Printer Tables	02
5.	Trainers Table	01
6.	Trainers Chair	01
7.	Steel cupboards drawer type	02
8.	Cabinet with drawer	01
9.	Steel Almira - big size	01
10.	Steel Almira- small size	01

#### **TEACHER'S/TRAINER'S QUALIFICATIONS:**

Qualification and other requirements for appointment of teachers/trainers for teaching this subject, on contractual basis should be decided by the State/ UT. The suggestive qualifications and minimum competencies for the teacher should be as follows:

Qualification		Minimum Competencies		Age Limit
Diploma in Computer Science/ Information	•	The candidate should have	•	18-37 years
Technology		a minimum of 1 year of work		(as on Jan. 01
OR		experience in the same job		(year))
Bachelor Degree in Computer Application/		role.	•	Age relaxation to
Science/ Information Technology (BCA, B.				be provided
Sc. Computer Science/ Information	•	S/He should be able to		as per Govt.
Technology)		communicate in English and		rules
OR		local language.		
Graduate with PGDCA OR				
DOEACC A Level Certificate.	•	S/He should have		
		knowledge of equipment,		
The suggested qualification is the minimum		tools, material, Safety,		
criteria. However higher qualifications will		Health & Hygiene.		
also be acceptable.				

Teachers/Trainers form the backbone of Skill (Vocational) Education being imparted as an integral part of Rashtriya Madhyamik Shiksha *Abhiyan* (RMSA). They are directly involved in teaching of Skill (vocational) subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Teachers/ Trainers, Educational Qualifications, Industry Experience and Certification/ Accreditation.

The State may engage Teachers/Trainers in schools approved under the component of scheme of Vocationalisation of Secondary and Higher Secondary Education under RMSA in following ways:

(i) Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC).

#### OR

(ii) Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF\*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

<sup>\*</sup> The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organizations involved in education and training must meet in order to be accredited by competent bodies to provide government- funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.

The educational qualifications required for being a Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers/ trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which S/he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Teachers/Trainers, the State should ensure that a standardized procedure for selection of (Vocational) Teachers/Trainers is followed. The selection procedure should consist of the following:

- (i) Written test for the technical/domain specific knowledge related to the sector;
- (ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and
- (iii) Practical test/mock test in classroom/workshop/laboratory.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Teachers/ Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

The Head Master/Principal of the school where the scheme is being implemented should facilitate and ensure that the (Vocational) Teachers/Trainers:

- Prepare session plans and deliver sessions which have a clear and relevant purpose and which engage the students;
- Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- Make effective use of learning aids and ICT tools during the classroom sessions;
- Engage students in learning activities, which include a mix of different methodologies, such as project based work, team work, practical and simulation based learning experiences;
- Work with the institution's management to organise skill demonstrations, site visits, on job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- · Identify the weaknesses of students and assist them in up-gradation of competency;
- Cater to different learning styles and level of ability of students;
- Assess the learning needs and abilities, when working with students with different abilities
- Identify any additional support the student may need and help to make special arrangements for that support;
- Provide placement assistance

Assessment and evaluation of (Vocational) Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the (Vocational) Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the (Vocational) Teachers/Trainers.

Following parameters may be considered during the appraisal process:

- Participation in guidance and counseling activities conducted at Institutional, District and State level;
- Adoption of innovative teaching and training methods;
- Improvement in result of vocational students of Class X or Class XII;
- Continuous up-gradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
- Membership of professional society at District, State, Regional, National and International level;
- Development of teaching-learning materials in the subject area;
- Efforts made in developing linkages with the Industry/Establishments;
- Efforts made towards involving the local community in Vocational Education
- Publication of papers in National and International Journals;
- Organisation of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.

#### **CAREER OPPORTUNITIES:**

The job of a data entry operator/ analyst is to work for a wide variety of public and private organisations. A data entry operator/analyst is responsible to input data in a quick and efficient manner, create data storage and should possess knowledge about the methods for recovering useful data when needed, organizing and analyzing data in a clear and effective way, navigating computer and database systems proficiently, editing and preparing reports based on the information they have put into the system. They also help the organisations to keep up with recording and analyzing the abundance of information received on a daily basis.

#### Some of the top sectors that require a data entry operator/analyst are listed below:

- Banks and Public Sector
- Marketing Companies
- Accounting Companies
- Human Resources
- Corporate Businesses
- MNCs
- Study Centers
- · Schools and Universities
- Hospitals or Healthcare Service Providers
- Insurance Firms
- Small-scale Businesses

#### **VERTICAL MOBILITY**

- Students can pursue Polytechnic/Diploma/Certificate courses in IT fields.
- Can work as DEO
- Data Entry/Analysis work from home for different companies

# CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2024-2025

## ARTIFICIAL INTELLIGENCE (SUB. CODE 417)

CLASS - IX

#### **OBJECTIVES OF THE COURSE:**

The objective of this module/curriculum - which combines both Inspire and Acquire modules is to develop a readiness for understanding and appreciating Artificial Intelligence and its application in our lives. This module/curriculum focuses on:

- Helping learners understand the world of Artificial Intelligence and its applications through games, activities and multi-sensorial learning to become Al-Ready.
- 2. Introducing the learners to three domains of AI in an age-appropriate manner.
- 3. Allowing the learners to construct the meaning of AI through interactive participation and engaging hands-on activities.
- 4. Revisiting AI domains, project cycle and Ethics
- 5. Introducing the learners to the importance of Math for AI, data literacy and generative AI
- 6. Introducing the learners to programming skills Basic python coding language.

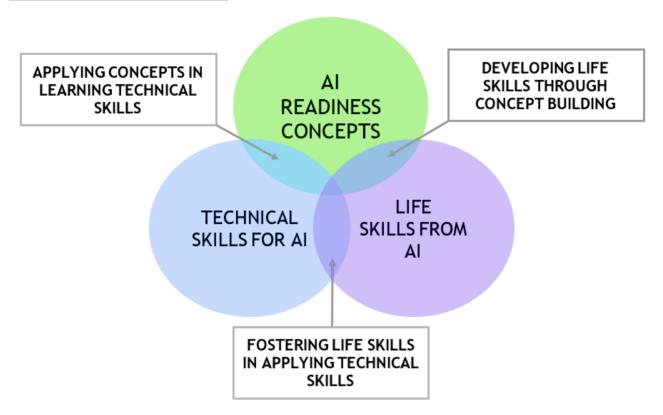
#### **LEARNING OUTCOMES:**

#### Learners will be able to

- 1. Identify and appreciate Artificial Intelligence and describe its applications in daily life.
- Relate, apply and reflect on the Human-Machine Interactions to identify and interact with the three domains of AI: Data, Computer Vision and Natural Language Processing and Undergo assessment for analysing their progress towards acquired AI-Readiness skills.
- 3. Imagine, examine and reflect on the skills required for futuristic job opportunities.
- 4. Unleash their imagination towards smart homes and build an interactive story around it.
- Understand the impact of Artificial Intelligence on Sustainable Development Goals to develop responsible citizenship.
- 6. Research and develop awareness of skills required for jobs of the future.
- 7. Gain awareness about AI bias and AI access and describe the potential ethical considerations of AI.
- 8. Develop effective communication and collaborative work skills.
- Get familiar and motivated towards Artificial Intelligence and Identify the Al Project Cycle framework.
- 10. Learn problem scoping and ways to set goals for an Al project and understand the iterative

- nature of problem scoping in the AI project cycle.
- 11. Brainstorm on the ethical issues involved around the problem selected.
- 12. Foresee the kind of data required and the kind of analysis to be done, identify data requirements and find reliable sources to obtain relevant data.
- 13. Use various types of graphs to visualize acquired data.
- 14. Understand types of modeling.
- 15. Understand the importance of Math for Al.
- 16. Learn the concept of data literacy and generative Al
- 17. Acquire introductory Python programming skills in a very user-friendly format.

#### **SKILLS TO BE DEVELOPED:**



#### **SCHEME OF STUDIES:**

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class IX opting for skill subject along with other education subjects.

The unit-wise distribution of hours and marks for class IX & X is as follows:

# ARTIFICIAL INTELLIGENCE (SUBJECT CODE 417) CLASS – IX (SESSION 2024-2025)

Total Marks: 100 (Theory-50 + Practical-50)

	UNITS	for The	HOURS ory and ctical	MAX. MARKS for Theory and Practical
	Employability Skills	<del>,</del>		
	Unit 1: Communication Skills-I	1	0	2
T A	Unit 2: Self-Management Skills-I	10		2
PAR	Unit 3: ICT Skills-I	1	0	2
<b>/</b>	Unit 4: Entrepreneurial Skills-I	1	5	2
	Unit 5: Green Skills-I	0	5	2
	Total	5	0	10
	Subject Specific Skills	T	T	
		Theory	Practical	
m	Unit 1: Al Reflection, Project Cycle and Ethics	30	25	10
<b>—</b>	Unit 2: Data Literacy	22	28	10
PAR	Unit 3: Math for AI (Statistics & Probability)	12	13	07
<b>"</b>	Unit 4: Introduction to Generative AI	08	12	05
	Unit 5: Introduction to Python	01	09	08
	Total	10	60	40
	Practical Work			
	Unit 5: Introduction to Python Practical File (minimum 15 programs)			15
PARTC	<ul> <li>Practical Examination</li> <li>Simple programs using input and output function</li> <li>Variables, Arithmetic Operators, Expressions, Data Types</li> <li>Flow of control and conditions</li> <li>Lists</li> <li>* Any 3 programs based on the above topics</li> </ul>			15
	Viva Voce			5
	Total			35
PART D	Project Work / Field Visit / Student Portfolio * relate it to Sustainable Development Goals			15
Δ.	Total			15
	GRAND TOTAL	2.	10	100

#### **DETAILED CURRICULUM/TOPICS FOR CLASS IX:**

#### **PART-A: EMPLOYABILITY SKILLS**

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-I	10
2.	Unit 2: Self-management Skills-I	10
3.	Unit 3: Information and Communication Technology Skills-I	10
4.	Unit 4: Entrepreneurial Skills-I	15
5.	Unit 5: Green Skills-I	05
	TOTAL	50

NOTE: Detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

#### PART-B - SUBJECT SPECIFIC SKILLS

- Unit 1: Al Reflection, Project Cycle and Ethics
- Unit 2: Data Literacy
- Unit 3: Math for AI (Statistics & Probability)
- Unit 4: Introduction to Generative AI
- Unit 5: Introduction to Python

#### **UNIT 1: AI REFLECTION, PROJECT CYCLE AND ETHICS**

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
AI Reflection	To identify and appreciate Artificial Intelligence and describe its applications in	Session: Introduction to AI and setting up the context of the curriculum
	daily life.	Recommended Activity: Make a statement about lighting and LUIS will interpret and adjust the house accordingly <a href="https://aidemos.microsoft.com/luis/demo">https://aidemos.microsoft.com/luis/demo</a>
	To recognize, engage and relate with the three realms of AI:, Computer Vision, Data Statistics and Natural Language Processing.	Recommended Activity: The AI Game  • Learners to participate in three games based on different AI domains.  - Game 1: Rock, Paper and Scissors (based on data) <a href="https://next.rockpaperscissors.ai/">https://next.rockpaperscissors.ai/</a> - Game 2: Semantris (based on Natural Language Processing - NLP) <a href="https://research.google.com/semantris/">https://research.google.com/semantris/</a> - Game 3: Quick Draw (based on Computer Vision - CV) <a href="https://quickdraw.withgoogle.com/">https://quickdraw.withgoogle.com/</a>

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
AI PROJECT CYCLE	Identify the AI Project Cycle framework.	Session: Introduction to AI Project Cycle     Problem Scoping     Data Acquisition     Data Exploration     Modeling     Evaluation     Deployment
	Learn problem scoping and ways to set goals for an Al project.	<ul> <li>Session: Problem Scoping Activity: Brainstorm around the theme provided and set a goal for the Al project.</li> <li>Discuss various topics within the given theme and select one.</li> <li>Fill in the 4Ws problem canvas and a problem statement to learn more about the problem identified in the community/ society</li> <li>List down/ Draw a mind map of problems related to the selected topic and choose one problem to be the goal for the project.</li> </ul>
	Identify stakeholders involved in the problem scoped. Brainstorm on the ethical issues involved around the problem selected.	<ul> <li>Activity: To set actions around the goal.</li> <li>List down the stakeholders involved in the problem.</li> <li>Search on the current actions taken to solve this problem.</li> <li>Think around the ethics involved in the goal of your project.</li> </ul>
	Understand the iterative nature of problem scoping for in the Al project cycle. Foresee the kind of data required and the kind of analysis to be done.	<ul> <li>Activity: Data and Analysis</li> <li>What are the data features needed?</li> <li>How will the features collected affect the problem?</li> <li>Where can you get the data?</li> <li>How frequent do you have to collect the data?</li> <li>What happens if you don't have enough data?</li> <li>What kind of analysis needs to be done?</li> <li>How will it be validated?</li> <li>How does the analysis inform the action?</li> </ul>
	Share what the students have discussed so far.	Presentation: Presenting the goal, actions and data.  Teamwork Activity:  Brainstorming solutions for the problem statement.
	Identify data requirements and find reliable sources to obtain relevant data.	Session: Data Acquisition Activity: Introduction to data and its types.  Students work around the scenarios given to them and think of ways to acquire data. Activity: Data Features  Identifying the possible data features affecting the problem. Activity: System Maps  Creating system maps considering data features identified.

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
	To understand the purpose of Data Visualisation	Session: Data Exploration/ Data Visualisation  Need of visualising data  Ways to visualise data using various types of graphical tools.  Quiz Time
	Use various types of graphs to visualise acquired data.	Recommended Activities: Let's use Graphical Tools  Selecting an appropriate graphical format and presenting the graph sketched.  Understanding graphs using <a href="https://datavizcatalogue.com/">https://datavizcatalogue.com/</a> Listing of newly learnt data visualization techniques.  Top 10 Song Prediction: Identify the data features, collect the data and convert into graphical representation.  Collect and store data in a spreadsheet and create some graphical representation to understand the data effectively.
	Understand modeling (Rule- based & Learning-based)	Session: Modeling  Introduction to modeling and types of models (Rule-based & Learning-based)
	Understand various evaluation techniques.	Session: Evaluation Learners will understand about new terms True Positive False Positive True Negative False Negative
	Challenge students to think about how they can apply their knowledge of deployment in future Al projects and encourage them to continue exploring different deployment methods.	Session: Deployment Recommended Case Study: Preventable Blindness. Activity: Implementation of AI project cycle to develop an AI Model for Personalized Education.
	To understand and reflect on the ethical issues around Al.	Session: Ethics Video Session: Discussing about AI Ethics Recommended Activity: Ethics Awareness  Students play the role of major stakeholders, and they have to decide what is ethical and what is not for a given scenario.  Students to explore Moral Machine (https://www.moralmachine.net/) to understand more about the impact of ethical concerns
	To gain awareness around Al bias and Al access.	Session: Al Bias and Al Access  Discussing about the possible bias in data collection  Discussing about the implications of Al technology

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
	To let the students analyse the advantages and disadvantages of Artificial Intelligence.	<ul> <li>Recommended Activity: Balloon Debate</li> <li>Students divide in teams of 3 and 2 teams are given same theme. One team goes in affirmation to AI for their section while the other one goes against it.</li> <li>They have to come up with their points as to why AI is beneficial/ harmful for the society.</li> </ul>

#### **UNIT 2: DATA LITERACY:**

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Basics of data literacy	<ul> <li>Define data literacy and recognize its importance Understand how data literacy enables informed decision-making and critical thinking</li> <li>Apply the Data Literacy Process Framework to analyze and interpret data effectively</li> <li>Differentiate between Data Privacy and Security</li> <li>Identify potential risks associated with data breaches and unauthorized access.</li> <li>Learn measures to protect data privacy and enhance data security</li> </ul>	Session: Basics of data literacy Introduction to Data Literacy Impact of data Literacy How to become Data Literate? What are data security and privacy? How are they related to AI? Best Practices for Cyber Security  Recommended Activity: Impact of News Articles Reference Videos:  https://www.youtube.com/watch?v =yhO_t-c3yJY https://www.youtube.com/watch?v =aO858HyFbKI https://www.cbse.gov.in/cbsenew/documents/Cyber%20Safety.pdf
Acquiring Data, Processing, and Interpreting Data	<ul> <li>Determine the best methods to acquire data.</li> <li>Classify different types of data and enlist different methodologies to acquire it.</li> <li>Define and describe data interpretation.</li> <li>Enlist and explain the different methods of data interpretation.</li> <li>Recognize the types of data interpretation.</li> <li>Realize the importance of data interpretation</li> </ul>	Session: Acquiring Data, Processing, and Interpreting Data
Project Interactive Data Dashboard & Presentation	<ul> <li>Recognize the importance of data visualization</li> <li>Discover different methods of data visualization</li> </ul>	Session: Project Interactive Data Dashboard & Presentation  Data visualization Using Tableau Reference Links  https://public.tableau.com/en-us/s/download  https://www.datawrapper.de/ Video Links:  https://www.youtube.com/watch?v=NL CzpPRCc7U  https://www.youtube.com/watch?v= M 8BnosAD78

**UNIT 3: MATH FOR AI (Statistics & Probability)** 

SUB-UNIT	LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Importance of Math for AI	Analyzing the data in the form of numbers/images and find the relation/pattern between the them. Use of Math in Al.	Session: Importance of Math for AI  Finding Patterns in Numbers and images.  Uses of Math -  Statistics  Linear Algebra  Probability  Calculus
	Number Patterns Picture Analogy	<ul> <li>Activity:</li> <li>observe the number pattern and find the missing number.</li> <li>To find connections between sets of images and use that to solve problems,</li> </ul>
Statistics	Understand the concept of Statistics in real life.	Session :      Definition of Statistics     Applications     Disaster Management     Sports     Diseases Prediction     Weather Forecast
	Application in various real life scenarios	<ul> <li>Activity: Uses of Statistics in daily life</li> <li>Students will explore the applications of statistics in real life .They collect data and can apply various statistical measures to analyze the data.</li> <li>Activity:Car Spotting and Tabulating Purpose:To implement the concept of data collection , analysis and interpretation.</li> <li>Activity Introduction:         <ul> <li>In this activity, Students will be engaged in data collection and tabulation.</li> <li>Data collection plays a key role in Artificial Intelligence as it forms the basis of statistics and interpretation by AI.</li> <li>This activity will also require students to answer a set of questions based on the recorded data.</li> </ul> </li> </ul>
Probability	Understand the concept of Probability in real life and explore various types of events.	<ul> <li>Session: Introduction to Probability</li> <li>How to calculate the probability of an event</li> <li>Types of events</li> <li>understand the concept of Probability using a relatable example.</li> <li>Exercise: Identify the type of event.</li> </ul>
	Application in various real life scenarios	Session : Applications of Probability

#### **UNIT 4: INTRODUCTION TO GENERATIVE AI:**

LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Students will be able to define Generative AI & classify different kinds.	Recommended Activity:  • Activity: Guess the Real Image vs. the AI-generated image
Students will be able to explain how Generative Al works and recognize how it learns.	Session:  Introduction to Generative AI  Generative AI vs Conventional AI  Session:  Types of Generative AI  Examples of Generative AI
<ul> <li>Applying Generative AI tools to create content.</li> <li>Understanding the ethical considerations of using Generative AI.</li> </ul>	Session:      Benefits of using Generative AI     Limitations of using Generative AI  Recommended Activities:     Hands-on Activity: GAN Paint     Generative AI tools  Session:     Ethical considerations of using Generative AI

#### **UNIT 5: INTRODUCTION TO PYTHON:**

LEARNING OUTCOMES	SESSION / ACTIVITY / PRACTICAL
Learn basic programming skills through gamified platforms.	Recommended Activity:  Introduction to programming using Online Gaming portals like Code Combat.
Acquire introductory Python programming skills in a very user-friendly format.	Session:  Introduction to Python language  Introducing python programming and its applications
	<ul> <li>Theory + Practical: Python Basics</li> <li>Students go through lessons on Python Basics         (Variables, Arithmetic Operators, Expressions, Comparison Operators, logical operators, Assignment Operators, Data Types - integer, float, strings, type conversion, using print() and input() functions)</li> <li>Students will try some simple problem-solving exercises on Python Compiler.</li> </ul>
	Practical: Flow of control and conditions  1. Students go through lessons on conditional and iterative statements (if, for and while)  2. Students will try some basic problem-solving exercises using conditional and iterative statements on Python Compiler.
	Practical: Python Lists 3. Students go through lessons on Python Lists (Simple operations using list) 4. Students will try some basic problem-solving exercises using lists on Python Compiler.

#### **PART-C: PRACTICAL WORK**

#### **UNIT 5: INTRODUCTION TO PYTHON: Suggested Program List**

#### **PRINT**

- To print personal information like Name, Father's Name, Class, School Name.
- To print the following patterns using multiple print commands-



- To find square of number 7
- To find the sum of two numbers 15 and 20.
- To convert length given in kilometers into meters.
- To print the table of 5 up to five terms.
- To calculate Simple Interest if the principle\_amount = 2000 rate\_of\_interest = 4.5 time = 10

#### **INPUT**

- To calculate Area and Perimeter of a rectangle
- To calculate Area of a triangle with Base and Height
- To calculating average marks of 3 subjects
- To calculate discounted amount with discount %
- To calculate Surface Area and Volume of a Cuboid

#### LIST

- Create a list in Python of children selected for science quiz with following names-Arjun, Sonakshi, Vikram, Sandhya, Sonal, Isha, Kartik Perform the following tasks on the list in sequence
  - o Print the whole list
  - o Delete the name "Vikram" from the list
  - Add the name "Jay" at the end
  - o Remove the item which is at the second position.
- Create a list num=[23,12,5,9,65,44]
  - o print the length of the list
  - o print the elements from second to fourth position using positive indexing
  - o print the elements from position third to fifth using negative indexing
- Create a list of first 10 even numbers, add 1 to each list item and print the final list.
- Create a list List\_1=[10,20,30,40]. Add the elements [14,15,12] using extend function. Now sort the final list in ascending order and print it.

#### IF, FOR, WHILE

- Program to check if a person can vote
- To check the grade of a student
- Input a number and check if the number is positive, negative or zero and display an appropriate message
- To print first 10 natural numbers
- To print first 10 even numbers
- To print odd numbers from 1 to n
- To print sum of first 10 natural numbers
- Program to find the sum of all numbers stored in a list

#### Importa nt Links

- https://cbseacademic.nic.in/web\_material/Curriculum21/publication/secondary/Python Content\_Manual.pdf
- https://drive.google.com/drive/folders/1qRAckDculA5i164OUFDlilxb8mT65MMb

#### PART-D: Project Work / Field Visit / Student Portfolio

\* relate it to Sustainable Development Goals

Suggested Projects/ Field Visit / Portfolio (Any one has to be done)

Suggested Projects/ Field visit / Portfolio (Any one has to be done)		
Suggested Projects	<ol> <li>Create an Al Model using tools like-         <ul> <li>Teachable Machine (<a href="https://teachablemachine.withgoogle.com/">https://teachablemachine.withgoogle.com/</a>)</li> <li>Machine Learning For Kids (<a href="https://machinelearningforkids.co.uk/">https://machinelearningforkids.co.uk/</a>)</li> </ul> </li> <li>Choose an issue that pertains to the objectives of sustainable development and carry out the actions listed below.         <ul> <li>To understand more about the problem identified, create a 4Ws problem canvas.</li> <li>Identify the data features and create a system map to understand relationship between them</li> <li>Visualize the data collected graphically (Spreadsheet software to be used store and visualize the data)</li> <li>Suggest an Al enabled solution to it (Prototype/Research Work)</li> </ul> </li> </ol>	
Suggested Field Visit	Visit to an industry or IT company or any other place that is creating or using Al applications and present the report for the same. Visit can be on physical or virtual mode.	
Suggested Student Portfolio	Maintaining a record of all AI activities and projects (For Example Letter to Futureself, Smart Home Floor Plan, Future Job Advertisement, Research Work on AI for SDGs and AI in Different Sectors, 4Ws canvas, System Map). (Minimum 5 Activities)	

#### LIST OF ITEMS/ EQUIPMENTS (MINIMUM REQUIREMENTS):

The equipment / materials listed below are required to conduct effective hands-on learning sessions while delivering the AI curriculum to class 10 students. The list below consists of minimal configuration required to execute the AI curriculum for class 10 and create social impact real time solutions/ projects. The quantities mentioned here are recommended for a batch of 20 students keeping the human-machine ratio as 2:1. An exhaustive list may be compiled by the teacher(s) teaching the subject.

S. NO.	ITEM NAME, DESCRIPTION & SPECIFICATION
Α	SYSTEM SPECIFICATIONS
1	Processor: Intel® Core™ i5-7300U Processor or equivalent with minimum SYSmark® 2018 Rating of 750 or higher
2	Graphic Card: Integrated graphics
3	Form Factor: - USFF (Ultra Small Form factor) System chassis volume less than One Litre
4	RAM: 8GB DDR4 – 2400MHz or above
5	Storage: 500 GB HDD – 7200 rpm
6	Display: 18.5" LED Monitor with HDMI, in-built-speaker,
7	Keyboard: Keyboard with numerical keypad (recommended)
8	Mouse: Optical Mouse
9	Webcam: Full HD Camera
10	Headphones with Mic
11	Dual Band Wireless Connectivity Min 800 Mbps
12	Bluetooth V4.2 or Higher
13	Ports: 4 USB 3.0 ports, dual high-definition display ports (HDMI 2.0/DP/thunderbolt 3.0 ports), High definition 8-channel audio through HDMI interface or through audio jack.
14	VPU: - Integrated or support for VPU - vision processing unit to accelerate AI machine vision applications.
В	SOFTWARE SPECIFICATIONS
1	Operating System: Any
2	Anti-Virus Activated
3	Internet Browser: Google Chrome
4	Productivity Suite: Any (Google+ Suite recommended)
5	Anaconda Navigator Distribution (https://bit.ly/AI-installation-guide)
6	Conceptual installations (https://bit.ly/Al-installation-guide)
7	Intel Open VINO tools
8	Python

**NOTE**: In keeping with the spirit of Recycle, Upcycle and Reuse, it is recommended to make use of any equipment/ devices/ accessories from the existing inventory in school.

#### **TEACHER'S/ TRAINER'S QUALIFICATIONS:**

Qualification and other requirements for appointment of teachers/trainers for teaching this subject, on contractual basis should be decided by the State/ UT. The suggestive qualifications and minimum competencies for the teacher should be as follows:

Qualification	Minimum Competencies	Age Limit	
Diploma in Computer Science/ Information Technology  OR  Bachelor's Degree in Computer Applications/ Science/ Information	The candidate should have a minimum of 1 year of work experience in the same job role.	• 18-37 years (as on Jan. 01 (year))	
Technology (BCA, B. Sc. Computer Science/ Information Technology)  OR	S/He should be able to communicate in English and local language.	<ul> <li>Age relaxation to be provided as per Govt.</li> </ul>	
Graduate with PGDCA  OR	S/He should have	rules	
DOEACC A Level Certificate.  The suggested qualification is the minimum	knowledge of equipment, tools, material, Safety, Health & Hygiene.		
criteria. However higher qualifications will also be acceptable.	rieaitii α riygierie.		

Teachers/Trainers form the backbone of Skill (Vocational) Education being imparted as an integral part of Rashtriya Madhyamik Shiksha *Abhiyan* (RMSA). They are directly involved in teaching of Skill (vocational) subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Teachers/ Trainers, Educational Qualifications, Industry Experience, and Certification/ Accreditation.

The State may engage Teachers/Trainers in schools approved under the component of scheme of Vocationalisation of Secondary and Higher Secondary Education under RMSA in following ways:

(i) Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC).

#### OR

(ii) Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF\*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

<sup>\*</sup> The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organizations involved in education and training must meet in order to be accredited by competent bodies to provide government- funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.

The educational qualifications required for being a Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers/ trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Teachers/Trainers, the State should ensure that a standardized procedure for selection of (Vocational) Teachers/Trainers is followed. The selection procedure should consist of the following:

- (i) Written test for the technical/domain specific knowledge related to the sector;
- (ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and
- (iii) Practical test/mock test in classroom/workshop/laboratory.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Teachers/ Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

The Headmaster/Principal of the school where the scheme is being implemented should facilitate and ensure that the (Vocational) Teachers/Trainers:

- Prepare session plans and deliver sessions which have a clear and relevant purpose, and which engage the students;
- Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- Make effective use of learning aids and ICT tools during the classroom sessions;
- Engage students in learning activities, which include a mix of different methodologies, such as project-based work, teamwork, practical and simulation-based learning experiences;
- Work with the institution's management to organise skill demonstrations, site visits, on-job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- Identify the weaknesses of students and assist them in up-gradation of competency;
- Cater to different learning styles and level of ability of students;
- Assess the learning needs and abilities, when working with students with different abilities
- Identify any additional support the student may need and help to make special arrangements for that support;
- Provide placement assistance

Assessment and evaluation of (Vocational) Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the (Vocational) Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the (Vocational) Teachers/Trainers.

Following parameters may be considered during the appraisal process:

- Participation in guidance and counseling activities conducted at Institutional, District and State level;
- Adoption of innovative teaching and training methods;
- Improvement in result of vocational students of Class X or Class XII;
- Continuous up-gradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
- Membership of professional society at District, State, Regional, National and International level;
- Development of teaching-learning materials in the subject area;
- Efforts made in developing linkages with the Industry/Establishments;
- Efforts made towards involving the local community in Vocational Education
- Publication of papers in National and International Journals;
- Organisation of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.

# CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2024-2025

## ARTIFICIAL INTELLIGENCE (SUB. CODE 417) CLASS – X

#### **OBJECTIVES OF THE COURSE:**

The objective of this module/curriculum - which combines both Inspire and Acquire modules is to develop a readiness for understanding and appreciating Artificial Intelligence and its application in our lives. This module/curriculum focuses on:

- 1. Helping learners understand the world of Artificial Intelligence and its applications through games, activities and multi-sensorial learning to become Al-Ready.
- 2. Introducing the learners to three domains of AI in an age-appropriate manner.
- 3. Allowing the learners to construct meaning of AI through interactive participation and engaging hands-on activities.
- 4. Introducing the learners to Al Project Cycle.
- 5. Introducing the learners to programming skills Basic python coding language.

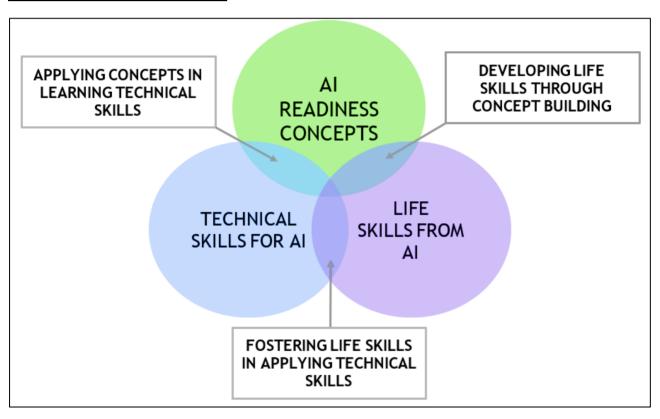
#### **LEARNING OUTCOMES:**

Learners will be able to

- Identify and appreciate Artificial Intelligence and describe its applications in daily life.
- Relate, apply and reflect on the Human-Machine Interactions to identify and interact with the three domains of AI: Data, Computer Vision and Natural Language Processing and Undergo assessment for analysing their progress towards acquired AI-Readiness skills.
- 3. Imagine, examine and reflect on the skills required for futuristic job opportunities.
- 4. Unleash their imagination towards smart homes and build an interactive story around it.
- 5. Understand the impact of Artificial Intelligence on Sustainable Development Goals to develop responsible citizenship.
- Research and develop awareness of skills required for jobs of the future.
- Gain awareness about AI bias and AI access and describe the potential ethical considerations of AI.
- 8. Develop effective communication and collaborative work skills.
- 9. Get familiar and motivated towards Artificial Intelligence and Identify the Al Project Cycle framework.
- 10. Learn problem scoping and ways to set goals for an AI project and understand the iterative nature of problem scoping in the AI project cycle.

- 11. Brainstorm on the ethical issues involved around the problem selected.
- 12. Foresee the kind of data required and the kind of analysis to be done, identify data requirements and find reliable sources to obtain relevant data.
- 13. Use various types of graphs to visualize acquired data.
- 14. Understand, create and implement the concept of Decision Trees.
- 15. Understand and visualize computer's ability to identify alphabets and handwritings.
- 16. Understand and appreciate the concept of Neural Network through gamification and learn basic programming skills through gamified platforms.
- 17. Acquire introductory Python programming skills in a very user-friendly format.

#### **SKILLS TO BE DEVELOPED:**



#### **SCHEME OF STUDIES:**

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class IX opting for skill subject along with other education subjects.

The unit-wise distribution of hours and marks for class IX & X is as follows:

## ARTIFICIAL INTELLIGENCE (SUBJECT CODE 417) CLASS – X (SESSION 2024-2025)

Total Marks: 100 (Theory-50 + Practical-50)

	UNITS	for The	HOURS ory and ctical	MAX. MARKS for Theory and Practical
PART A	Employability Skills			
	Unit 1: Communication Skills-II	10		2
	Unit 2: Self-Management Skills-II	10		2
	Unit 3: ICT Skills-II	10		2
	Unit 4: Entrepreneurial Skills-II	15		2
	Unit 5: Green Skills-II	05		2
	Total	50		10
	Subject Specific Skills	Theory	Practical	
	Unit 1: Introduction to Artificial Intelligence (AI)	15	-	7
	Unit 2: Al Project Cycle	15	-	9
	Unit 3: Advance Python (To be assessed in Practicals only)	-	30	
PART B	Unit 4: Data Science (Introduction, Applications of Data Sciences, Data Science: Getting Started (up to Data Access),  remaining portion is to be assessed in practical	7	8	4
	Unit 5: Computer Vision (Introduction, Applications of Computer Vision, Computer Vision: Getting Started (up to RGB Images), remaining portion is to be assessed in practical	12	18	4
	Unit 6: Natural Language Processing	25	5	8
	Unit 7: Evaluation	15		8
	Total	150		40
	Practical Work:			
	Practical File with minimum 15 Programs			15
S	Practical Examination			5
PART	<ul><li>Unit 3: Advance Python</li><li>Unit 4: Data Science</li></ul>			5
PA	Unit 5: Computer Vision			5
	Viva Voce			5
	Total			35
۵	Project Work / Field Visit / Student Portfolio (Any one to be done)			10
RT	Viva Voce			5
PART	Total			15
	GRAND TOTAL	2	10	100

# DETAILED CURRICULUM/TOPICS FOR CLASS X

### Part-A: EMPLOYABILITY SKILLS

S. No.	Units	<b>Duration in Hours</b>
1.	Unit 1: Communication Skills-II	10
2.	Unit 2: Self-management Skills-II	10
3.	Unit 3: Information and Communication Technology Skills-II	10
4.	Unit 4: Entrepreneurial Skills-II	15
5.	Unit 5: Green Skills-II	05
	TOTAL	50

Note: The detailed curriculum/ topics to be covered under Part A: Employability Skills can be downloaded from CBSE website

### Part-B - SUBJECT SPECIFIC SKILLS

- Unit 1: Introduction to Artificial Intelligence (AI)
- Unit 2: Al Project Cycle
- Unit 3: Advance Python
- Unit 4: Data Science
- Unit 5: Computer Vision
- Unit 6: Natural Language Processing
- Unit 7: Evaluation

### **UNIT 1: INTRODUCTION TO ARTIFICIAL INTELLIGENCE**

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Foundational concepts of AI	Understand the concept of human intelligence and its	Session: What is Intelligence?
consepts of 7th	various components such as reasoning, problem-solving, and creativity	Session: Decision Making.  • How do you make decisions?  • Make your choices!  Session: what is Artificial Intelligence and what
Basics of AI: Let's Get Started	Understand the concept of Artificial Intelligence (AI) and its domains	is not?  Session: Introduction to AI and related terminologies.  Introducing AI, ML & DL.  Introduction to AI Domains (Data Sciences, CV & NLP)  Gamified tools for each domain-  Data Sciences- Impact Filter (Impact of rise in temperature on different species)  https://artsexperiments.withgoogle.com/impactfilter/  CV- Autodraw (It pairs machine learning with drawings from talented artists to help you draw stuff fast.)  https://www.autodraw.com/

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
		<ul> <li>NLP- Wordtune (Al writing tool that rewrites, rephrases, and rewords your writing) <a href="https://www.wordtune.com/">https://www.wordtune.com/</a></li> </ul>
	Explore the use of AI in real Life.	<b>Session:</b> Applications of AI – A look at Real-life AI implementations
	Learn about the ethical concerns involved in AI development, such as AI bias, data privacy and how they can be addressed.	Session: Al Ethics  ■ Moral Machine Activity: a platform for gathering a human perspective on moral decisions made by machine intelligence, such as self-driving cars.  http://moralmachine.mit.edu/

# **UNIT 2: AI PROJECT CYCLE**

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction	Understand the stages involved in the AI project cycle, such as problem scoping, data collection, data exploration, modeling, evaluation.	Session: Introduction to AI Project Cycle
Problem Scoping	Learn about the importance of project planning in Al development and how to define project goals and objectives.	Session: Understanding Problem Scoping & Sustainable Development Goals
Data Acquisition	Develop an understanding of the importance of data collection in AI and how to choose the right data sources.	Session: Simplifying Data Acquisition
Data Exploration	Know various data exploration techniques and its importance	Session: Visualising Data
Modelling	Know about the different machine learning algorithms used to train Al models	<ul> <li>Introduction to modelling         <ul> <li>Introduction to Rule Based &amp; Learning Based AI Approaches</li> <li>Activity: Teachable machine to demonstrate Supervised Learning <a href="https://teachablemachine.withgoogle.com/">https://teachablemachine.withgoogle.com/</a></li> </ul> </li> <li>Activity: Infinite Drum Machine to demonstrate Unsupervised learning <a href="https://experiments.withgoogle.com/ai/drum-machine/view/">https://experiments.withgoogle.com/ai/drum-machine/view/</a></li> <li>Introduction to Supervised, Unsupervised &amp; Reinforcement Learning <a href="Models(Optional)**">Models(Optional)***</a></li> <li>Neural Networks</li> </ul>
Evaluation	Know the importance of evaluation and various metrics available for evaluation	Session: Evaluating the idea!

# **UNIT 3 : ADVANCE PYTHON** (To be assessed through Practicals)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Recap	Understand to work with Jupyter Notebook, creating virtual environment, installing Python Packages.	Session: Jupyter Notebook
	Able to write basic Python programs using fundamental concepts such as variables, data types, operators, and control structures.	Session: Introduction to Python
	Able to use Python built-in functions and libraries.	Session: Python Basics

# **UNIT 4: DATA SCIENCES** (To be assessed through Theory)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction	Define the concept of Data Science and understand its applications in various fields.	Session: Introduction to Data Science
		Session: Applications of Data Science
Getting Started	Understand the basic concepts of data acquisition, visualization, and exploration.	Session: Revisiting AI Project Cycle, Data Collection, Data Access Activities: Game: Rock, Paper & Scissors <a href="https://next.rockpaperscissors.ai/">https://next.rockpaperscissors.ai/</a>

# **UNIT 4: DATA SCIENCES** (To be assessed through Practicals)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Python Packages	Use Python libraries such as NumPy, Pandas, and Matplotlib for data analysis and visualization.	Session: Python for Data Sciences  Numpy Pandas Matplotlib
Concepts of Data Sciences	Understand the basic concepts of statistics, such as mean, median, mode, and standard deviation, and apply them to analyze data using various Python packages.	Session: Statistical Learning & Data Visualisation
K-nearest neighbour	Understand the basic concepts of the KNN algorithm	Activity: Personality Prediction (Optional)**
model ( <b>Optional</b> )**	and its applications in supervised learning.	Session: Understanding K-nearest neighbour model (Optional)**

**UNIT 5: COMPUTER VISION** (To be assessed through Theory)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction	Define the concept of Computer Vision and	Session: Introduction to Computer Vision
	understand its applications in various fields.	Session: Applications of CV
Concepts of Computer Vision	Understand the basic concepts of image representation, feature extraction, object detection, and segmentation.	Session: Understanding CV Concepts  Computer Vision Tasks Basics of Images-Pixel, Resolution, Pixel value Grayscale and RGB images  Activities: Game- Emoji Scavenger Hunt https://emojiscavengerhunt.withgoogle.com/ RGB Calculator: https://www.w3schools.com/colors/colors/rgb.asp Create your own pixel art:
		<ul> <li>www.piskelapp.com</li> <li>Create your own convolutions: <a href="http://setosa.io/ev/image-kernels/">http://setosa.io/ev/image-kernels/</a></li> </ul>

# UNIT 5: COMPUTER VISION (To be assessed through Practicals)

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
OpenCV	Use Python libraries such as OpenCV for basic image processing and computer	Session: Introduction to OpenCV
	vision tasks.	Hands-on: Image Processing
Convolution Operator (Optional)**	Apply the convolution operator to process images and extract useful features.	Session: Understanding Convolution operator (Optional)**
		Activity: Convolution Operator (Optional)**
Convolution Neural Network	Understand the basic architecture of a CNN and its applications in computer	Session: Introduction to CNN (Optional)**
(Optional)**	vision and image recognition.	Session: Understanding CNN (Optional)**  • Kernel  • Layers of CNN
		Activity: Testing CNN (Optional)**

# **UNIT 6: NATURAL LANGUAGE PROCESSING**

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction	Understand the concept of Natural Language Processing (NLP) and its importance in the field of Artificial Intelligence (AI).	Session: Introduction to Natural Language Processing Activity: Use of Google Translate for same spelling words Session: NLP Applications Session: Revisiting AI Project Cycle
Chatbots	Explore the various applications of NLP in everyday life, such as chatbots, sentiment analysis, and automatic summarization	Activity: Introduction to Chatbots
Language Differences	Gain an understanding of the challenges involved in understanding human language by machine.	Session: Human Language VS Computer Language
Concepts of Natural Language Processing	Learn about the Text Normalization technique used in NLP and popular NLP model - Bag-of-Words	Session: Data Processing  Text Normalisation Bag of Words  Hands-on: Text processing Data Processing Bag of Words TFIDF (Optional)** NLTK (Optional)**

### **UNIT 7: EVALUATION**

SUB-UNIT	LEARNING OUTCOMES	SESSION/ ACTIVITY/ PRACTICAL
Introduction	Understand the role of evaluation in the development and implementation of Al systems.	<ul> <li>Session: Introduction to Model Evaluation</li> <li>What is Evaluation?</li> <li>Different types of Evaluation techniques- Underfit, Perfect Fit, OverFit</li> </ul>
Model Evaluation Terminology	Learn various Model Evaluation Terminologies	<ul> <li>Session: Model Evaluation Terminologies</li> <li>The Scenario - Prediction, Reality, True Positive, True Negative, False Positive, False Negative</li> <li>Confusion Matrix</li> <li>Activity- to make a confusion matrix based on data given for Containment Zone Prediction Model</li> </ul>
Confusion Matrix	Learn to make a confusion matrix for given Scenario	Session & Activity: Confusion Matrix
Evaluation Methods	Learn about the different types of evaluation techniques in AI, such as Accuracy, Precision, Recall and F1 Score, and their significance.	Session: Evaluation Methods
		Activity: Practice Evaluation

### **PART-C: PRACTICAL WORK**

Suggested Programs List	<ul> <li>Write a program to add the elements of the two lists.</li> <li>Write a program to calculate mean, median and mode using Numpy</li> <li>Write a program to display line chart from (2,5) to (9,10).</li> <li>Write a program to display a scatter chart for the following points (2,5), (9,10),(8,3),(5,7),(6,18).</li> <li>Read csv file saved in your system and display 10 rows.</li> <li>Read csv file saved in your system and display its information</li> <li>Write a program to read an image and display using Python</li> <li>Write a program to read an image and identify its shape using Python</li> </ul>	
Important Links	https://cbseacademic.nic.in/web_material/Curriculum21/publication/secondary/Class10_Facilitator_Handbook.pdf     Link to Al Activities & Jupyter Notebooks (including sample projects) https://bit.ly/class_X_activities_jupyter_notebooks	

# PART-D: Project Work / Field Visit / Student Portfolio \* relate it to Sustainable Development Goals Suggested Projects/ Field Visit / Portfolio (any one activity to be one)

Sample Projects	Student Marks Prediction Model     CNN Model on Smoke and Fire Detection
Field Work	Students' participation in the following-
Student Portfolio (to be continued from class IX)	<ul> <li>Maintaining a record of all AI activities</li> <li>Hackathons</li> <li>Competitions (CBSE/Interschool)</li> </ul> Note: Portfolio should contain minimum 5 activities

<sup>\*\*</sup>NOTE: Optional components shall not be assessed. They are for extra knowledge

### **LIST OF ITEMS/ EQUIPMENTS (MINIMUM REQUIREMENTS):**

The equipment / materials listed below are required to conduct effective hands-on learning sessions while delivering the AI curriculum to class 10 students. The list below consists of minimal configuration required to execute the AI curriculum for class 10 and create social impact real time solutions/ projects. The quantities mentioned here are recommended for a batch of 20 students keeping the human-machine ratio as 2:1. An exhaustive list may be compiled by the teacher(s) teaching the subject.

S. NO.	ITEM NAME, DESCRIPTION & SPECIFICATION
Α	SYSTEM SPECIFICATIONS
1	Processor: Intel® Core™ i5-7300U Processor or equivalent with minimum SYSmark® 2018 Rating of 750 or higher
2	Graphic Card: Integrated graphics
3	Form Factor: - USFF (Ultra Small Form factor) System chassis volume less than One Litre
4	RAM: 8GB DDR4 – 2400MHz or above
5	Storage: 500 GB HDD – 7200 rpm
6	Display: 18.5" LED Monitor with HDMI, in-built-speaker,
7	Keyboard: Keyboard with numerical keypad (recommended)
8	Mouse: Optical Mouse
9	Webcam: Full HD Camera
10	Headphones with Mic
11	Dual Band Wireless Connectivity Min 800 Mbps
12	Bluetooth V4.2 or Higher
13	Ports: 4 USB 3.0 ports, dual high-definition display ports (HDMI 2.0/DP/thunderbolt 3.0 ports), High definition 8-channel audio through HDMI interface or through audio jack.
14	VPU: - Integrated or support for VPU - vision processing unit to accelerate AI machine vision applications.
В	SOFTWARE SPECIFICATIONS
1	Operating System: Any
2	Anti-Virus Activated
3	Internet Browser: Google Chrome
4	Productivity Suite: Any (Google+ Suite recommended)
5	Anaconda Navigator Distribution (https://bit.ly/Al-installation-guide)
6	Conceptual installations (https://bit.ly/Al-installation-guide)
7	Intel Open VINO tools
8	Python

**NOTE**: In keeping with the spirit of Recycle, Upcycle and Reuse, it is recommended to make use of any equipment/ devices/ accessories from the existing inventory in school.

### **TEACHER'S/ TRAINER'S QUALIFICATIONS:**

Qualification and other requirements for appointment of teachers/trainers for teaching this subject, on contractual basis should be decided by the State/ UT. The suggestive qualifications and minimum competencies for the teacher should be as follows:

Qualification	Minimum Competencies	Age Limit
Diploma in Computer Science/ Information Technology OR Bachelor's Degree in Computer Applications/ Science/ Information Technology (BCA, B. Sc. Computer Science/ Information Technology) OR Graduate with PGDCA OR DOEACC A Level Certificate.  The suggested qualification is the minimum criteria. However higher qualifications will also be acceptable.	<ul> <li>The candidate should have a minimum of 1 year of work experience in the same job role.</li> <li>S/He should be able to communicate in English and local language.</li> <li>S/He should have knowledge of equipment, tools, material, Safety, Health &amp; Hygiene.</li> </ul>	<ul> <li>18-37 years (as on Jan. 01 (year))</li> <li>Age relaxation to be provided as per Govt. rules</li> </ul>

Teachers/Trainers form the backbone of Skill (Vocational) Education being imparted as an integral part of Rashtriya Madhyamik Shiksha *Abhiyan* (RMSA). They are directly involved in teaching of Skill (vocational) subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Teachers/ Trainers, Educational Qualifications, Industry Experience, and Certification/ Accreditation.

The State may engage Teachers/Trainers in schools approved under the component of scheme of Vocationalisation of Secondary and Higher Secondary Education under RMSA in following ways:

(i) Directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education (PSSCIVE), NCERT or the respective Sector Skill Council (SSC).

#### OR

- (ii) Through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF\*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.
  - \* The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organizations involved in education and training must meet in order to be accredited by competent bodies to provide government- funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.

The educational qualifications required for being a Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers/ trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Teachers/Trainers, the State should ensure that a standardized procedure for selection of (Vocational) Teachers/Trainers is followed. The selection procedure should consist of the following:

- (i) Written test for the technical/domain specific knowledge related to the sector;
- (ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and
- (iii) Practical test/mock test in classroom/workshop/laboratory.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Teachers/ Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

The Headmaster/Principal of the school where the scheme is being implemented should facilitate and ensure that the (Vocational) Teachers/Trainers:

- Prepare session plans and deliver sessions which have a clear and relevant purpose, and which engage the students;
- Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- Make effective use of learning aids and ICT tools during the classroom sessions;
- Engage students in learning activities, which include a mix of different methodologies, such as project-based work, teamwork, practical and simulation-based learning experiences;
- Work with the institution's management to organise skill demonstrations, site visits, on-job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- Identify the weaknesses of students and assist them in up-gradation of competency;
- Cater to different learning styles and level of ability of students;
- Assess the learning needs and abilities, when working with students with different abilities
- Identify any additional support the student may need and help to make special arrangements for that support;
- Provide placement assistance

Assessment and evaluation of (Vocational) Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the (Vocational) Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the (Vocational) Teachers/Trainers.

Following parameters may be considered during the appraisal process:

- Participation in guidance and counseling activities conducted at Institutional, District and State level;
- Adoption of innovative teaching and training methods;
- Improvement in result of vocational students of Class X or Class XII;
- Continuous up-gradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
- Membership of professional society at District, State, Regional, National and International level;
- Development of teaching-learning materials in the subject area;
- Efforts made in developing linkages with the Industry/Establishments;
- Efforts made towards involving the local community in Vocational Education
- Publication of papers in National and International Journals;
- Organisation of activities for promotion of vocational subjects;
- Involvement in placement of students/student support services.

# ENGLISH LANGUAGE AND LITERATURE Code No. 184 2024-25

### 1. Background

At the secondary stage of English language learning the textual materials and other resources should represent a wide range of learning experience. Literature has always played a significant role in learning language. However, it is felt that pupils should be apprised with contemporary issues, read authentic literature and experiences of people to reflect and build their personality traits.

While there is a trend for inclusion of a wider range of contemporary and authentic texts, accessible and culturally appropriate pieces of literature should play a pivotal role at the secondary stage of education. The English class is meant for reading literature from different perspectives and to engage in activities for developing communicative competence, creativity and enrichment of language skills It should not be seen as a place merely to read poems and stories in, but an area of activities to develop the learner's imagination as a major aim of language study, and to equip the learner with communicative skills to perform various language functionsthrough speech and writing.

### 2. Objectives:

Objectives of the course are to enable learners to:

- build greater confidence and proficiency in oral and written communication
- develop the ability and knowledge required in order to engage in independent reflection and inquiry
- make appropriate usage of English language
- to communicate in various social settings
- equip learners with essential language skills to question and to articulate their point of view
- build competence in the different aspects of the Language
- develop sensitivity to, and appreciation of world literature representing varieties of English and cultures embedded in It.
- enable the learner to access knowledge and information through reference skills (consulting a dictionary / thesaurus, library, internet, etc.)
- develop curiosity and creativity through extensive reading
- facilitate self-learning to enable them to become independent learners
- review, organise and edit their own work and work done by peers
- integrate listening and speaking skills in the curriculum.
- give a brief oral description of events / incidents of topical interest
- retell the contents of authentic audio texts (weather reports, public announcements,

- simple advertisements, short interviews, etc.)
- participate in conversations, discussions, etc., on topics of mutual interest in nonclassroom situations
- narrate a story which has been depicted pictorially or in any other non-verbal mode
- respond, in writing, to business letters, official communications email etc.
- read and identify the main points / significant details of texts like scripts of audiovideo interviews, discussions, debates, etc.
- write without prior preparation on a given topic and be able to defend or explain the stand taken / views expressed in the form of article, speech, or a debate
- write a summary of short lectures on familiar topics by making / taking notes
- write an assessment of different points of views expressed in a discussion / debate
- read poems effectively (with proper rhythm and intonation)
- transcode information from a graph / chart to a description / report and write a dialogue, short story or report
- Develop appreciation for Indian languages(multilingualism), translations and Indian Literature.

### 3. Language Items

In addition to consolidating the grammatical items practised earlier, the courses at the secondary level seek to reinforce the following explicitly:

- sequence of tenses
- reported speech in extended texts
- modal auxiliaries (those not covered at upper primary)
- non-finites (infinitives, gerunds, participles)
- conditional clauses
- complex and compound sentences
- phrasal verbs and prepositional phrases
- cohesive devices
- punctuation (semicolon, colon, dash, hyphen, parenthesis or use of brackets and exclamation mark)

### 4. Methods and Techniques

The methodology is based on a multi-skill, activity-based, learner-centered approach. Care is taken to fulfill the functional (communicative), literary (aesthetic) and cultural (sociological) needs of the learner. In this situation, the teacher is the facilitator of learning, She/he presents language items, create situations which motivates the child to use English for the purposes of communication and expression. Aural-oral teaching and testing is an integral feature of the teaching-learning process. The electronic and print media could be used extensively. A few suggested activities are:

- Role play
- Simulating real life situations
- Dramatising and miming
- Problem solving and decision making
- Interpreting information given in tabular form and schedule
- Using newspaper clippings as a resource for comprehending and analysing issues.
- Borrowing situations and registers from the world around the learners, frombooks and from other disciplines
- Using language games, riddles, puzzles and jokes
- Interpreting pictures / sketches / cartoons
- Debating and discussing
- Narrating and discussing stories, anecdotes, etc.
- Reciting poems
- Working in pairs and groups
- Using media inputs computer, television, video cassettes, tapes, software packages

# ENGLISH LANGUAGE AND LITERATURE (Code No. 184) SYLLABUS CLASS – IX 2024-25

Sections			Weightage
Α	Reading Skills	(40 periods)*	20 Marks
В	Writing Skills and Gramma	r (40 periods)*	20 Marks
С	Language through Literatur	e (50 periods)*	40 Marks

<sup>\*</sup>This is a suggestive number.

### **Section A Reading Skills**

I. Reading Comprehension through Unseen Passage

20 Marks

**1.** Discursive passage of 400-450 words.

(10 marks)

**2.** Case-based factual passage (with visual input- statistical data/chart etc.) of 200-250 words.

(10 marks)

### (Total length of two passages to be 600-700 words)

Multiple Choice Questions / Objective Type Questions/Very Short Answer Questions will be asked to assess comprehension, interpretation, analysis, inference, evaluation and vocabulary.

# Section B Writing Skills and Grammar

II Grammar 10 Marks

- Determiners
- Tenses
- Modals
- Subject verb concord
- Reported speech
  - o Commands and requests
  - Statements
  - Questions
- 3. The courses at the secondary level seek to cement high professional grasp of grammatical items and levels of accuracy. Accurate use of spelling, punctuation and grammar will be assessed through Gap Filling/ Editing/Transformation exercises. Ten out of twelve questions will be attempted.

III Writing Skills 10 marks

**4.** Writing a Descriptive Paragraph (word limit 100-120 words), describing a person / event / situation, based on visual or verbal cue/s. One out of two questions to be answered.

5 marks

5. Writing a Story (on a given cue/title)/Diary Entry, in 100-120 words. One out of two questions is to be answered.5 marks

### Section C

### Language through Literature

40 Marks

#### IV Reference to the Context

(5+5 = 10 Marks)

- **6.** One extract out of two, from Drama / Prose.
- **7.** One extract out of two, from poetry.

Multiple Choice Questions / Objective Type Questions will be asked to assess interpretation, analysis, inference, evaluation, appreciation and vocabulary.

### **IV. Short & Long Answer Questions**

**8.** Four out of Five Short Answer Type Questions to be answered in 40-50 words from the book BEEHIVE to assess interpretation, analysis, inference and evaluation.

4x3=12 marks

**9.** Two out of Three Short Answer Type Questions to be answered in 40-50 words from the book MOMENTS to assess interpretation, analysis, inference and evaluation.

3x2=6 marks

- 10. One out of two Long Answer Type Questions from BEEHIVE to be answered in about 100-120 words to assess creativity, imagination and extrapolation beyond the text and across the text. This can also be a passage-based question taken from a situation/plot from the text.
  6 marks
- 11. One out of two Long Answer Type Questions from MOMENTS, on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words.
  6 marks

Prescribed Books: Published by NCERT, New Delhi

#### **Beehive**

#### **Prose**

- a. The Fun They Had
- b. The Sound of Music
- c. The Little Girl

- d. A Truly Beautiful Mind
- e. The Snake and the Mirror
- f. My Childhood
- g. Reach For The Top

h. Kathmandu

### Poems-

- The Road Not taken
- 2. Wind
- 3. Rain on The Roof
- 4. The Lake Isle of Innisfree

i. If I were You

- 5. A Legend of the Northland
- 6. No Men Are Foreign
- 7. On killing a tree
- 8. A Slumber Did My Spirit Seal

### **Moments**

- 1. The Lost Child
- 2. The adventures of Toto
- 3. Iswaran the Storyteller
- 4. In the kingdom of fools

- 5. The Happy Prince
- 6. The Last Leaf
- 7. A House is not a Home
- 8. The Beggar

# 3. WORDS AND EXPRESSIONS – I (WORKBOOK FOR CLASS IX) – Units 1 to 6 and Units 8,10 & 11

**NOTE: Teachers are advised to:** 

- (i) encourage classroom interaction among peers, students and teachers through activities such as role play, group work etc.
- (ii) reduce teacher-talk time and keep it to the minimum,
- (iii) take up questions for discussion to encourage pupils to participate and to marshal their ideas and express and defend their views.

Besides measuring learning outcome, texts serve the dual purpose of diagnosing mistakes and areas of non-learning. To make evaluation a true index of learners' knowledge, each language skill is to be assessed through a judicious mixture of different types of questions.

### **INTERNAL ASSESSMENT**

### **Listening and Speaking Competencies**

**30 Periods** 

Assessment of Listening and Speaking Skills will be for 05 marks.

It is recommended that listening and speaking skills should be regularly practiced.

Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 14<sup>th</sup> May 2020 at the http://cbseacademic.nic.in/web material/Circulars/2020/33 Circular 2020.pdf for details.

Guidelines for the Assessment of Listening and Speaking Skills are given at Annexure I.

# **ENGLISH LANGUAGE AND LITERATURE**

(Code No. 184) 2024-25 CLASS – IX

Marks-80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skillsand Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriacy of style and tone, using appropriate format and fluency.  Applying conventions, using integrated structures with accuracy and fluency	20
Language through Literature	Recalling, reasoning, appreciating, applying literary conventions, illustrating and justifying. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
Total		80

For the details of Internal Assessment of 20 marks, please refer to the circular no.

Acad-11/2019, dated March 06, 2019.

# ENGLISH LANGUAGE AND LITERATURE (Code No. 184) CLASS – X 2024-25

### **SECTION - WISE WEIGHTAGE**

Sections			Weightage
Α	Reading Skills	(40 periods)*	20 Marks
В	Writing Skills with Grammar	(40 periods)*	20 Marks
С	Language through Literature	(50 periods)*	40 Marks

<sup>\*</sup>This is a suggestive number.

### Section A

### **Reading Skills**

### I. Reading Comprehension through Unseen Passage

20 Marks

1. Discursive passage of 400-450 words.

(10 marks)

2. Case-based factual passage (with visual input- statistical data, chart etc.) of 200-250 words. (10 marks)

### (Total length of two passages to be 600-700 words)

Multiple Choice Questions / Objective Type Questions, and Short Answer Questions (to be answered in 30-40 words) will be asked to assess comprehension, interpretation, analysis, inference, evaluation and vocabulary.

# Section B Writing Skills and Grammar

II Grammar 10 Marks

- Determiners
- Tenses
- Modals
- Subject verb concord
- Reported speech
  - Commands and requests
  - o Statements
  - o Questions

**3.** The courses at the secondary level seek to cement high professional grasp of grammatical items and levels of accuracy. Accurate use of spelling, punctuation and grammar in context will be assessed through Gap Filling/ Editing/Transformation exercises. Ten out of 12 questions will have to be attempted.

||| Writing Skills 10 marks

- 4. Writing a Formal Letter based on a given situation, in 100-120 words. One out of two questions is to be answered.5 marks
- 5. Writing an Analytical Paragraph in 100-120 words on a given Map/ Chart/ Graph/Cue/s.One out of two questions is to be answered.5 marks

# Section C 40 Marks Language through Literature

### IV. Reference to the Context

(5+5 = 10 Marks)

- **6.** One extract out of two from Drama / Prose.
- **7.**One extract out of two from poetry.

Multiple Choice Questions / Objective Type Questions Very Short Answer Questions (one word/ One sentence), Short Answer Questions (to be answered in 30-40 words) will be asked to assess inference, analysis, interpretation, evaluation and vocabulary.

## V. Short & Very Long Answer Questions

30 Marks

**8.** Four out of Five Short Answer Type Questions to be answered in 40-50 words from the bookFIRST FLIGHT to assess interpretation, analysis, inference and evaluation.

4x3=12 marks

- 9. Two out of Three Short Answer Type Questions to be answered in 40-50 words each from FOOTPRINTS WITHOUT FEET to assess interpretation, analysis, inference and evaluation.
  2x3=6 marks
- 10. One out of two Long Answer Type Questions from FIRST FLIGHT to be answered in about 100-120 words each to assess creativity, imagination and extrapolation beyond the text and across the text. This can be a passage-based question taken from a situation/plot from the text.
  6 marks
- 11.One out of two Long Answer Type Questions from FOOTPRINTS WITHOUT FEET, on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words.6 marks

### Prescribed Books: Published by NCERT, New Delhi

### 1. FIRST FLIGHT

### A. Prose

- 1. A Letter to God
- 2. Nelson Mandela Long Walk to Freedom
- 3. Stories About Flying
- 4. From the Diary of Anne Frank
- 5. Glimpses of India
- 6. Mijbil the Otter
- 7. Madam Rides the Bus
- 8. The Sermon at Benares
- 9. The Proposal (Play)

#### B. Poems

- 1. Dust of Snow
- 2. Fire and Ice
- 3. A Tiger in the Zoo
- 4. How to Tell Wild Animals
- 5. The Ball Poem
- 6. Amanda!
- 7. The Trees
- 8. Fog
- 9. The Tale of Custard the Dragon
- 10. For Anne Gregory

### 2. FOOTPRINTS WITHOUT FEET

- 1. A Triumph of Surgery
- 2. The Thief's Story
- 3. The Midnight Visitor
- 4. A Question of Trust
- 5. Footprints Without Feet
- 6. The Making of a Scientist
- 7. The Necklace
- 8. Bholi
- 9. The Book that Saved the Earth

# 3. WORDS AND EXPRESSIONS – II (WORKBOOK FOR CLASS X) – Units 1 to 4 and Units 7 to 11

### Note: Teachers are advised to:

(i) encourage interaction among peers, students and teachers through activities such as role play, discussions, group work etc.

- (ii) reduce teacher-talking time and keep it to the minimum,
- (iii) take up questions for discussion to encourage pupils to participate and to marshal their ideas and express and defend their views, and
- (iv) follow the Speaking and Listening activities given in the NCERT books.

  Besides measuring learning outcome, texts serve the dual purpose of diagnosing mistakes and areas of non-learning. To make evaluation a true index of learners' knowledge, each language skills to be assessed through a judicious mixture of different types of questions.

### INTERNAL ASSESSMENT

**Listening and Speaking Competencies** 

30 Periods

Assessment of Listening and Speaking Skills will be for 05 marks.

It is recommended that listening and speaking skills should be regularly practiced .

Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 14<sup>th</sup> May 2020 at the http://cbseacademic.nic.in/web material/Circulars/2020/33 Circular 2020.pdf for details

Guidelines for the Assessment of Listening and Speaking Skills are given at Annexure I.

# **ENGLISH LANGUAGE AND LITERATURE**

CLASS – X 2024-25

# Marks 80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skillsand Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriacy of style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20
Language through Literature	Recalling, reasoning, appreciating, applying literary conventions illustrating and justifying etc. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
Total		80

For the details of Internal Assessment of 20 marks, please refer to the circular no. Acad-11/2019, dated March 06, 2019.

#### Annexure I

### **Guidelines for Assessment of Listening and Speaking Skills (ALS)**

ALS is a component of the Subject Enrichment Activity under Internal Assessment. ALS must be seen as an integrated component of all four language skills rather than a compartment of two. Suggested activities, therefore, take into consideration an integration of the four language skills but during assessment, emphasis will be given to speaking and listening, since reading and writing are already being assessed in the written exam.

# Assessment of Listening and Speaking Skills: (5 Marks)

#### i. Activities:

- Subject teachers must refer to books prescribed in the syllabus.
- In addition to the above, teachers may plan their own activities and create theirown material for assessing the listening and speaking skills.
- ii. **Parameters for Assessment:** The listening and speaking skills are to be assessed on the following parameters:
  - a. Interactive competence (Initiation & turn taking, relevance to the topic)
  - b. Fluency (cohesion, coherence and speed of delivery)
  - c. Pronunciation
  - d. Language (grammar and vocabulary)

### A suggestive rubric is given below:

Interaction	1.	2.	3.	4.	5.
	<ul> <li>Contributions are mainlyunrelated to those of other speakers</li> <li>Shows hardly any initiative in the development of conversation</li> <li>Very limited interaction</li> </ul>	<ul> <li>Contributions are oftenunrelated to those of the other speaker</li> <li>Generally passive in the development of conversation</li> </ul>	<ul> <li>Develops interaction adequately, makes however minimal effortto initiate conversation</li> <li>Needs constant prompting to take turns</li> </ul>	<ul> <li>Interaction is adequately initiated and developed</li> <li>Takes turn butneeds some prompting</li> </ul>	<ul> <li>Initiates &amp; logically develops simple conversation on familiar topics</li> <li>Takes turns appropriately</li> </ul>

Fluency & Coherence	<ul> <li>Noticeably/ long pauses; rate of speech is slow</li> <li>Frequent repetition and/or self-correction this is all right in informal conversation</li> <li>Links only basic sentences; breakdown of coherence evident.</li> </ul>	<ul> <li>Usually fluent; produces simple speech fluently, but loses coherence in complex communication</li> <li>Often hesitates and/or resorts toslow speech</li> <li>Topics partly developed; notalways concluded logically</li> </ul>	Is willing tospeak at length, however repetition isnoticeable     Hesitates and/or self corrects; occasionally loses coherence     Topics developed, but usually not logically concluded	Speaks without noticeable effort, with a little repetition     Demonstrates hesitation to find words or use correct grammatical structures and/or self- correction     Topics not fully developed to merit.	Speaks fluently almost with no repetition & minimal hesitation Develops topicfully & coherently
Pronunciation	<ul> <li>Frequent inaccurate pronunciation</li> <li>Communication is severely affected</li> </ul>	<ul> <li>Frequently unintelligible articulation</li> <li>Frequent phonological errors</li> <li>Major communication problems</li> </ul>	<ul> <li>Largely correct pronunciation &amp; clear articulation except occasional errors</li> <li>Mostly correct pronunciation&amp;clear articulation</li> <li>Is clearly understood most of the time; very few phonological errors</li> </ul>		<ul> <li>Pronouncescorrectly &amp; articulates clearly</li> <li>Is always comprehensible</li> <li>uses appropriate intonation</li> </ul>
Vocabulary & Grammar	almost no flexibility, and mostly strugglesfor appropriate words  Many Grammatical errors impacting  almost no some of the topics, with limited vocabulary.  A few grammaticalerrors with limited vocabulary. A few grammaticalerrors vocabulary  Minor error not hamp		Is able to communicate on most of the topics with appropriate vocabulary     Minor errors that do not hamper communication	<ul> <li>Is able to communicate on most of the topics using a wide range of appropriate vocabulary, using new words and expressions</li> <li>No grammatical errors</li> </ul>	

### iii. Schedule:

- The practice of listening and speaking skills should be done throughout the academicyear.
- The final assessment of the skills is to be done as per the convenience and schedule of the school.

# हिंदी मातृभाषा (कोड-002) कक्षा 9वीं-10वीं (2024-25)

राष्ट्रीय शिक्षा नीति 2020 तथा केंद्रीय माध्यमिक शिक्षा बोर्ड द्वारा समय-समय पर दक्षता आधारित शिक्षा, कला समेकित अधिगम, अनुभवात्मक अधिगम को अपनाने की बात की गई है, जो शिक्षार्थियों की प्रतिभा को उजागर करने, खेल-खेल में सीखने पर बल देने, आनंदपूर्ण ज्ञानार्जन और विद्यार्जन के विविध तरीकों को अपनाने तथा अनुभव के द्वारा सीखने पर बल देती है।

दक्षता आधारित शिक्षा से तात्पर्य है- सीखने और मूल्यांकन करने का एक ऐसा दृष्टिकोण, जो शिक्षार्थी के सीखने के प्रतिफल और विषय में विशेष दक्षता को प्राप्त करने पर बल देता है। दक्षता वह क्षमता, कौशल, ज्ञान और दृष्टिकोण है, जो व्यक्ति को वास्तविक जीवन में कार्य करने में सहायता करती है। इससे शिक्षार्थी यह सीख सकते हैं कि ज्ञान और कौशल को किस प्रकार प्राप्त किया जाए तथा उन्हें वास्तविक जीवन की समस्याओं पर कैसे लागू किया जाए। जीवनोपयोगी बनाना तथा वास्तविक जीवन के अनुभवों से पाठ को समृद्ध करना, ही दक्षता आधारित शिक्षा है। इसके लिए उच्च स्तरीय चिंतन कौशल पर विशेष बल देने की आवश्यकता है।

कला समेकित अधिगम को शिक्षण-अधिगम प्रक्रिया में सुनिश्चित करना अत्यधिक आवश्यक है। कला के संसार में कल्पना की एक अलग ही उड़ान होती है। कला एक व्यक्ति की रचनात्मक अभिव्यक्ति है। कला समेकित अधिगम से तात्पर्य है- कला के विविध रूपों संगीत, नृत्य, नाटक, कविता, रंगशाला, यात्रा, मूर्तिकला, आभूषण बनाना, गीत लिखना, नुक्कड़ नाटक, कोलाज, पोस्टर, कला प्रदर्शनी को शिक्षण अधिगम की प्रक्रिया का अभिन्न हिस्सा बनाना। किसी विषय को आरंभ करने के लिए आइस ब्रेकिंग गतिविधि के रूप में तथा सामंजस्यपूर्ण समझ पैदा करने के लिए अंतरविषयक या बहुविषयक परियोजनाओं के रूप में कला समेकित अधिगम का प्रयोग किया जाना चाहिए। इससे पाठ अधिक रोचक एवं ग्राह्म हो जाएगा।

अनुभवात्मक अधिगम या आनुभविक ज्ञानार्जन का उद्देश्य शैक्षिक वातावरण को शिक्षार्थी केंद्रित बनाने के साथ-साथ स्वयं मूल्यांकन करने, आलोचनात्मक रूप से सोचने, निर्णय लेने तथा ज्ञान का निर्माण कर उसमें पारंगत होने से है। यहाँ शिक्षक की भूमिका सुविधा प्रदाता व प्रेक्षक की रहती है। ज्ञानार्जन-अनुभाविक ज्ञानार्जन, सहयोगात्मक तथा स्वतंत्र रूप से होता है और यह शिक्षार्थियों को एक साथ कार्य करने तथा स्वयं के अनुभव द्वारा सीखने पर बल देता है। यह सिद्धांत और व्यवहार के बीच की दूरी को कम करता है।

माध्यमिक स्तर तक आते-आते विद्यार्थी किशोर हो चुका होता है और उसमें सुनने, बोलने, पढ़ने, लिखने के साथ-साथ आलोचनात्मक दृष्टि विकसित होने लगती है। भाषा के सौंदर्यात्मक पक्ष, कथात्मकता/गीतात्मकता, दृश्य-श्रव्य और प्रिंट की भाषा की समझ, शब्द शक्तियों की समझ, राजनैतिक एवं सामाजिक चेतना का विकास, स्वयं की अस्मिता का संदर्भ और आवश्यकता के अनुसार उपयुक्त भाषा-प्रयोग, शब्दों का सुचिंतित प्रयोग, भाषा की नियमबद्ध प्रकृति आदि से विद्यार्थी परिचित हो जाता है। इतना ही नहीं, वह विविध विधाओं और अभिव्यक्ति की अनेक शैलियों से भी परिचित हो चुका होता है। अब विद्यार्थी की दृष्टि आस-पड़ोस, राज्य-देश की सीमा को लाँघते हुए वैश्विक क्षितिज तक फैल जाती है।

इन बच्चों की दुनिया में समाचार, खेल, फ़िल्म तथा अन्य कलाओं के साथ-साथ पत्र-पत्रिकाएँ और अलग-अलग तरह की किताबें भी प्रवेश पा चुकी होती हैं।

इस स्तर पर मातृभाषा हिंदी का अध्ययन साहित्यिक, सांस्कृतिक और व्यावहारिक भाषा के रूप में कुछ इस तरह से हो कि उच्चतर माध्यमिक स्तर पर पहुँचते-पहुँचते यह विद्यार्थियों की पहचान, आत्मविश्वास और विमर्श की भाषा बन सके। प्रयास यह भी हो कि विद्यार्थी भाषा के लिखित प्रयोग के साथ-साथ सहज और स्वाभाविक मौखिक अभिव्यक्ति में भी सक्षम हो सके।

# इस पाठ्यक्रम के अध्ययन से -

- (क) विद्यार्थी अगले स्तरों पर अपनी रुचि और आवश्यकता के अनुरूप हिंदी की पढ़ाई कर सकेंगे तथा हिंदी में बोलने और लिखने में सक्षम हो सकेंगे।
- (ख) अपनी भाषा दक्षता के चलते उच्चतर माध्यमिक स्तर पर विज्ञान, समाज विज्ञान और अन्य के साथ सहज संबद्धता (अंतर्संबंध) स्थापित कर सकेंगे।
- (ग) दैनिक जीवन व्यवहार के विविध क्षेत्रों में हिंदी के औपचारिक/अनौपचारिक उपयोग की दक्षता हासिल कर सकेंगे।
- (घ) भाषा प्रयोग के परंपरागत तौर-तरीकों एवं विधाओं की जानकारी एवं उनके समसामयिक संदर्भों की समझ विकसित कर सकेंगे।
- (ङ) हिंदी भाषा में दक्षता का इस्तेमाल वे अन्य भाषा-संरचनाओं की समझ विकसित करने के लिए कर सकेंगे।

# दृश्य-श्रव्य, मल्टी मीडिया तथा विविध प्रिंट माध्यमों से प्रसारित सूचनाओं को समझना विश्लेषित करना और सप्रेषित कर सकेंगे।

- कक्षा आठवीं तक अर्जित भाषिक कौशलों (सुनना, बोलना, पढ़ना और लिखना) का उत्तरोत्तर विकास।
- सृजनात्मक साहित्य के आलोचनात्मक आस्वाद की क्षमता का विकास।
- स्वतंत्र और मौखिक रूप से अपने विचारों की अभिव्यक्ति का विकास।
- ज्ञान के विभिन्न अनुशासनों के विमर्श की भाषा के रूप में हिंदी की विशिष्ट प्रकृति एवं क्षमता का बोध कराना।
- साहित्य की प्रभावकारी क्षमता का उपयोग करते हुए सभी प्रकार की विविधताओं (राष्ट्रीयता, धर्म, जाति, लिंग एवं भाषा) के प्रति सकारात्मक और संवेदनशील आचार-विचार का विकास।
- भारतीय भाषाओं एवं विदेशी भाषाओं की सांस्कृतिक विविधता से परिचय।
- व्यावहारिक और दैनिक जीवन में विविध अभिव्यक्तियों की मौखिक व लिखित क्षमता का विकास।
- संचार माध्यमों (प्रिंट और इलेक्ट्रॉनिक) में प्रयुक्त हिंदी की प्रकृति से अवगत कराना और नवीन भाषा प्रयोग करने की क्षमता से परिचय। (मल्टीमीडिया, सोशल मीडिया, पौडकास्ट, ब्लाग)
- विश्लेषण और तर्क क्षमता का विकास।
- भावाभिव्यक्ति क्षमताओं का उत्तरोत्तर विकास।

- मतभेद, विरोध और टकराव की परिस्थितियों में भी भाषा को संवेदनशील और तर्कपूर्ण इस्तेमाल से शांतिपूर्ण संवाद की क्षमता का विकास।
- भाषा की समावेशी और बहुभाषिक प्रकृति की समझ और व्यवहार का विकास करना।

# शिक्षण युक्तियाँ

माध्यमिक कक्षाओं में अध्यापक की भूमिका उचित वातावरण के निर्माण में सहायक होनी चाहिए। भाषा और साहित्य की पढ़ाई में इस बात पर ध्यान देने की ज़रूरत होगी कि -

- विद्यार्थी द्वारा की जा रही गलितयों को भाषा के विकास के अनिवार्य चरण के रूप में स्वीकार किया जाना चाहिए, जिससे विद्यार्थी अबाध रूप से बिना झिझक के लिखित और मौखिक अभिव्यक्ति करने में उत्साह का अनुभव करें। विद्यार्थियों पर शुद्धि का ऐसा दबाव नहीं होना चाहिए कि वे तनाव महसूस करने लगें। उन्हें भाषा के सहज, कारगर और रचनात्मक रूपों से इस तरह परिचित कराना उचित है कि वे स्वयं, सहज रूप से भाषिक योग्यताओं का विकास कर सकें।
- विद्यार्थी स्वतंत्र और अबाध रूप से लिखित और मौखिक अभिव्यक्ति करें। अधिगम बाधित होने पर अध्यापक,
   अध्यापन शैली में परिवर्तन करें।
- ऐसे शिक्षण-बिंदुओं की पहचान की जाए, जिनसे कक्षा में विद्यार्थी निरंतर सक्रिय भागीदारी करें और अध्यापक
   भी इस प्रक्रिया में उनके साथी बनें।
- हर भाषा का अपना व्याकरण होता है। भाषा की इस प्रकृति की पहचान कराने में पिरवेशगत और पाठगत संदर्भों का प्रयोग करना चाहिए। यह पूरी प्रक्रिया ऐसी होनी चाहिए कि विद्यार्थी स्वयं को शोधकर्ता समझें तथा अध्यापक इसमें केवल निर्देशन करें।
- हिंदी में क्षेत्रीय प्रयोगों, अन्य भाषाओं के प्रयोगों के उदाहरण से यह बात स्पष्ट की जानी चाहिए कि ये प्रयोग विभेदीकरण नहीं उत्पन्न करते है, बल्कि लिपि भाषा के समावेशी स्वरूप को पुष्ट करते हैं और उसका परिवेश अनिवार्य रूप से बहुभाषिक होता है।
- भिन्न क्षमता वाले विद्यार्थियों के लिए उपयुक्त शिक्षण-सामग्री का इस्तेमाल किया जाए तथा किसी भी प्रकार से उन्हें अन्य विद्यार्थियों से कमतर या अलग न समझा जाए।
- कक्षा में अध्यापक को हर प्रकार की विविधताओं (लिंग, जाति, वर्ग, धर्म आदि) के प्रति सकारात्मक और संवेदनशील वातावरण निर्मित करना चाहिए।
- काव्य भाषा के मर्म से विद्यार्थी का परिचय कराने के लिए ज़रूरी होगा कि किताबों में आए काव्यांशों की लयबद्ध प्रस्तुतियों के ऑडियो-वीडियो कैसेट तैयार किए जाएँ। अगर आसानी से कोई गायक/गायिका मिले तो कक्षा में मध्यकालीन साहित्य के अध्यापन-शिक्षण में उससे मदद ली जानी चाहिए।

- रा.शै.अ. और प्र.प.,(एन.सी.ई.आर.टी.) द्वारा उपलब्ध कराए गए अधिगम प्रतिफल/सीखने-सिखाने की प्रक्रिया जो इस पाठ्यचर्या के साथ संलग्नक के रूप में उपलब्ध है, को शिक्षक द्वारा दक्षता आधारित शिक्षा का लक्ष्य प्राप्त करने के लिये अनिवार्य रूप से इस्तेमाल करने की आवश्यकता है।
- शिक्षा मंत्रालय के विभिन्न संगठनों तथा स्वतंत्र निर्माताओं द्वारा उपलब्ध कराए गए कराए गए अन्य कार्यक्रम/ ई-सामग्री वृत्तचित्रों और फ़ीचर फ़िल्मों को शिक्षण-सामग्री के तौर पर इस्तेमाल करने की ज़रूरत है। इनके प्रदर्शन के क्रम में इन पर लगातार बातचीत के ज़िरए सिनेमा के माध्यम से भाषा के प्रयोग कि विशिष्टता की पहचान कराई जा सकती है और हिंदी की अलग-अलग छटा दिखाई जा सकती है।
- कक्षा में सिर्फ़ पाठ्यपुस्तक की उपस्थिति से बेहतर होगा कि शिक्षक के हाथ में तरह-तरह की पाठ्यसामग्री
   को विद्यार्थी देखें और कक्षा में अलग-अलग मौकों पर शिक्षक उनका इस्तेमाल करें।
- भाषा लगातार ग्रहण करने की क्रिया में बनती है, इसे प्रदर्शित करने का एक तरीका यह भी है कि शिक्षक खुद यह सिखा सकें कि वे भी शब्दकोश, साहित्यकोश, संदर्भग्रंथ की लगातार मदद ले रहे हैं। इससे विद्यार्थियों में इनके इस्तेमाल करने को लेकर तत्परता बढ़ेगी। अनुमान के आधार पर निकटतम अर्थ तक पहुँचकर संतुष्ट होने की जगह वे सटीक अर्थ की खोज करने के लिए प्रेरित होंगे। इससे शब्दों की अलग-अलग रंगत का पता चलेगा, वे शब्दों के सूक्ष्म अंतर के प्रति और सजग हो पाएँगे।

# श्रवण व वाचन (मौखिक बोलना) संबंधी योग्यताएँ

# श्रवण (सुनना) कौशल

- वर्णित या पठित सामग्री, वार्ता, भाषण, परिचर्चा, वार्तालाप, वाद-विवाद, कविता-पाठ आदि को सुनकर अर्थ ग्रहण करना, विश्लेषित मूल्यांकन करना और अभिव्यक्ति के ढंग को जानना।
- वक्तव्य के भाव, विनोद व उसमें निहित संदेश, व्यंग्य आदि को समझना।
- वैचारिक मतभेद होने पर भी वक्ता की बात को ध्यानपूर्वक, धैर्यपूर्वक व शिष्टाचार के साथ सुनना व वक्ता के दृष्टिकोण को समझना।
- ज्ञानार्जन मनोरंजन व प्रेरणा ग्रहण करने हेतु सुनना।
- वक्तव्य का आलोचनात्मक विश्लेषण करना एवं सुनकर उसका सार ग्रहण करना।

# श्रवण (सुनना) वाचन (बोलना) का परीक्षण : कुल 5 अंक (2.5+2.5)

 परीक्षक किसी प्रासंगिक विषय पर एक अनुच्छेद का स्पष्ट वाचन करेगा। अनुच्छेद तथ्यात्मक या सुझावात्मक हो सकता है। अनुच्छेद लगभग 100-150 शब्दों का होना चाहिए।

या

परीक्षक 1-2 मिनट का श्रव्य अंश (ऑडियो क्लिप) सुनवाएगा। अंश रोचक होना चाहिए। कथ्य /घटनापूर्ण एवं स्पष्ट होना चाहिए। वाचक का उच्चारण शुद्ध, स्पष्ट एवं विराम चिह्नों के उचित प्रयोग सहित होना चाहिए। • परीक्षार्थी ध्यानपूर्वक परीक्षा/ ऑडियो क्लिप को सुनने के पश्चात परीक्षक द्वारा पूछे गए प्रश्नों का अपनी समझ से मौखिक उत्तर देंगे।

# कौशलों के मूल्यांकन का आधार

	श्रवण		वाचन
1	विद्यार्थी में परिचित संदर्भों में प्रयुक्त शब्दों और पदों को	1	विद्यार्थी केवल अलग-अलग शब्दों और पदों के
	समझने की सामान्य योग्यता है।		प्रयोग की योग्यता प्रदर्शित करता है।
2	छोटे सुसंबद्ध कथनों को परिचित संदभीं में समझने की	2	परिचित संदर्भों में शुद्धता से केवल छोटे सुसंबद्ध
	योग्यता है।		कथनों का सीमित प्रयोग करता है।
3	परिचित या अपरिचित दोनों संदर्भों में कथित सूचना को	3	अपेक्षित दीर्घ भाषण में जटिल कथनों के प्रयोग
	स्पष्ट समझने की योग्यता है।		की योग्यता प्रदर्शित करता है।
4	दीर्घ कथनों को पर्याप्त शुद्धता से समझता है और	4	अपरिचित स्थितियों में विचारों को तार्किक ढंग से
	निष्कर्ष निकाल सकता है।		संगठित कर धाराप्रवाह रूप में प्रस्तुत कर सकता
			है।
5	जटिल कथनों के विचार-बिंदुओं को समझने और	5	उद्देश्य और श्रोता के लिए उपयुक्त शैली को
	विश्लेषित करने की योग्यता प्रदर्शित करता है।		अपना सकता है।

# टिप्पणी

- परीक्षण से पूर्व परीक्षार्थी को तैयारी के लिए कुछ समय दिया जाए।
- विवरणात्मक भाषा में विषय के अनुकूल तीनों कालों का प्रयोग अपेक्षित है।
- निर्धारित विषय परीक्षार्थी के अनुभव संसार के हों, जैसे कोई चुटकुला या हास्य-प्रसंग सुनाना, हाल में पढ़ी पुस्तक या देखे गए सिनेमा की कहानी सुनाना।
- शिक्षार्थी को विषय केंद्रित स्वतंत्र अभिव्यक्ति करने का अवसर प्रदान करें।

# पठन कौशल

- सरसरी दृष्टि से पढ़कर पाठ का केंद्रीय विचार ग्रहण करना।
- एकाग्रचित हो एक अभीष्ट गित के साथ मौन पठन करना।
- पठित सामग्री पर अपनी प्रतिक्रिया व्यक्त करना।
- भाषा, विचार एवं शैली की सराहना करना।
- साहित्य के प्रति अभिरुचि का विकास करना।
- साहित्य की विभिन्न विधाओं की प्रकृति के अनुसार पठन कौशल का विकास।
- संदर्भ के अनुसार शब्दों के अर्थ-भेदों की पहचान करना।

- सक्रिय (व्यवहारोपयोगी) शब्द भंडार की वृद्धि करना।
- पठित सामग्री के विभिन्न अंशों का परस्पर संबंध समझना।
- पठित अनुच्छेदों के शीर्षक एवं उपशीर्षक देना।
- कविता के प्रमुख उपादान यथा तुक, लय, यित, गित, बलाघात आदि से परिचित कराना।

### लेखन कौशल

- लिपि के मान्य रूप का ही व्यवहार करना।
- विराम-चिह्नों का उपयुक्त प्रयोग करना।
- प्रभावपूर्ण भाषा तथा लेखन-शैली का स्वाभाविक रूप से प्रयोग करना।
- उपयुक्त अनुच्छेदों में बाँटकर लिखना।
- प्रार्थना पत्र, निमंत्रण पत्र, बधाई पत्र, संवेदना पत्र, ई-मेल, आदेश पत्र, एस.एम.एस आदि लिखना और विविध प्रपत्रों को भरना।
- विविध स्रोतों से आवश्यक सामग्री एकत्र कर अभीष्ट विषय पर निबंध लिखना।
- देखी हुई घटनाओं का वर्णन करना और उन पर अपनी प्रतिक्रिया देना।
- हिंदी की एक विधा से दूसरी विधा में रूपांतरण का कौशल।
- समारोह और गोष्ठियों की सूचना और प्रतिवेदन तैयार करना।
- सार, संक्षेपीकरण एवं भावार्थ लिखना।
- गद्य एवं पद्य अवतरणों की व्याख्या लिखना।
- स्वानुभूत विचारों और भावनाओं को स्पष्ट सहज और प्रभावशाली ढंग से अभिव्यक्त करना।
- क्रमबद्धता और प्रकरण की एकता बनाए रखना।
- लिखने में सृजनात्मकता लाना।
- अनावश्यक काट-छाँट से बचते हुए सुपाठ्य लेखन कार्य करना
- दो भिन्न पाठों की पाठ्यवस्तु पर चिंतन करके उनके मध्य की संबद्धता (अंतर्संबंधों) पर अपने विचार अभिव्यक्त करने में सक्षम होना।
- रटे-रटाए वाक्यों के स्थान पर अभिव्यक्तिपरक/ स्थिति आधारित/ उच्च चिंतन क्षमता वाले प्रश्नों पर सहजता से अपने मौलिक विचार प्रकट करना।

# रचनात्मक अभिव्यक्ति

# अनुच्छेद लेखन

- पूर्णता संबंधित विषय के सभी पक्षों को अनुच्छेद के सीमित आकार में संयोजित करना
- क्रमबद्धता– विचारों को क्रमबद्ध एवं तर्कसंगत विधि से प्रकट करना
- विषय-केंद्रित प्रारंभ से अंत तक अनुच्छेद का एक सूत्र में बँधा होना

• **सामासिकता** – अनावश्यक विस्तार न देकर सीमित शब्दों में यथासंभव विषय से संबद्ध पूरी बात कहने का प्रयास करना

## पत्र लेखन

- अनौपचारिक पत्र विचार-विमर्श का ज़िरया, जिनमें मैत्रीपूर्ण भावना निहित, सरलता, संक्षिप्त और सादगी से भरी लेखन शैली
- औपचारिक पत्रों द्वारा दैनिक जीवन की विभिन्न स्थितियों में कार्य, व्यापार, संवाद, परामर्श, अनुरोध तथा सुझाव के लिए प्रभावी एवं स्पष्ट संप्रेषण क्षमता का विकास
- सरल और बोलचाल की भाषा शैली, उपयुक्त, सटीक शब्दों के प्रयोग, सीधे-सादे ढंग से विषय की स्पष्ट और प्रत्यक्ष प्रस्तुति
- प्रारूप की आवश्यक औपचारिकताओं के साथ सुस्पष्ट, सुलझे और क्रमबद्ध विचार आवश्यक; तथ्य, संक्षिप्तता
   और संपूर्णता के साथ प्रभावी प्रस्तुति

# विज्ञापन लेखन

# (विज्ञापित वस्तु / विषय को केंद्र में रखते हुए)

- विज्ञापित वस्तु के विशिष्ट गुणों का उल्लेख
- आकर्षक लेखन शैली
- प्रस्तुति में नयापन, वर्तमान से जुड़ाव तथा दूसरों से भिन्नता
- विज्ञापन में आवश्यकतानुसार नारे (स्लोगन) का उपयोग
- विज्ञापन लेखन में बॉक्स, चित्र अथवा रंग का उपयोग अनिवार्य नहीं है, किंतु समय होने पर प्रस्तुति को प्रभावी
   बनाने के लिए इनका उपयोग किया जा सकता है।

# संवाद लेखन

# (दी गई परिस्थितियों के आधार पर संवाद लेखन)

- सीमा के भीतर एक दूसरे से जुड़े सार्थक और उद्देश्यपूर्ण संवाद
- पात्रों के अनुकूल भाषा शैली
- कोष्ठक में वक्ता के हाव-भाव का संकेत
- संवाद लेखन के अंत तक विषय/मुद्दे पर वार्ता पूरी

# लघुकथा लेखन

# (दिए गए विषय/शीर्षक आदि के आधार पर रचनात्मक सोच के साथ लघुकथा लेखन)

- कथात्मकता
- निरंतरता, जिज्ञासा/रोचकता/कल्पनाशील्ता
- प्रभावी संवाद/ पात्रानुकूल संवाद

- रचनात्मकता/
- उद्देश्यपरकता

# संदेश लेखन

# (शुभकामना, पर्व-त्योहारों एवं विशेष अवसरों पर दिए जाने वाले संदेश)

- विषय से संबद्धता
- संक्षिप्त और सारगर्भित
- भाषाई दक्षता एवं प्रस्तुति
- रचनात्मकता/सृजनात्मकता
- विषय के अनुकूल काव्य-पंक्तियों का आंशिक उपयोग, किंतु इसकी अनिवार्यता नहीं

# ई-मेल लेखन

# (विविध विषयों पर आधारित औपचारिक ई-मेल लेखन)

- बोधगम्य भाषा
- विषय से संबद्धता
- संक्षिप्त, स्पष्ट व सारगर्भित
- शिष्टाचार व औपचारिकताओं का निर्वाह

# स्ववृत्त लेखन

# (उपलब्ध रिक्ति के लिए स्ववृत्त लेखन)

- स्पष्ट, संपूर्ण व व्यवस्थित
- नाम, जन्मतिथि, वर्तमान पता, शैक्षणिक योग्यता, अनुभव, अभिरुचियों, आत्मकथ्य, दूरभाष
   आदि का उल्लेख (परीक्षा में गोपनीयता का निर्वाह अपेक्षित)
- अन्य विशेष जानकारी/ योग्यता आदि

# सूचना लेखन

# (औपचारिक शैली में व्यावहारिक जीवन से संबंधित विषयों पर आधारित सूचना लेखन)

- सरल एवं बोधगम्य भाषा
- विषय की स्पष्टता
- विषय से जुड़ी संपूर्ण जानकारी
- औपचारिक शिष्टाचार का निर्वाह

# हिंदी पाठ्यक्रम-अ (कोड सं. 002) कक्षा 9वीं हिंदी - अ परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2024-25

खंड		भारांक
क	अपठित बोध	14
ख	व्यावहारिक व्याकरण	16
ग	पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक	30
घ	रचनात्मक लेखन	20

• भारांक-{80(वार्षिक बोर्ड परीक्षा)+20 (आंतरिक परीक्षा)

निर्धारित समय- 3 घंटे भारांक-80

	वार्षिक बोर्ड परीक्षा हेतु भार विभाजन						
	खंड – क (अपठित बोध)						
		विषयवस्तु	उपभार	कुल भार			
1	अपि						
	अतिव	नघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न					
	अ	एक अपठित गद्यांश लगभग 250 शब्दों का इसके आधार पर एक अंकीय तीन	7	14			
		बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे					
		जाएँगे					
	ब	एक अपठित काव्यांश अधिकतम 120 शब्दों का इसके आधार पर एक अंकीय तीन	7				
		बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे					
		जाएँगे					
		खंड – ख (व्यावहारिक व्याकरण)					
2	व्याक	रण के लिए निर्धारित विषयों पर विषयवस्तु का बोध, भाषिक बिंदु/ संरचना आदि पर					
	अतिव	नघूत्तरात्मक प्रश्न   (1x16)					
	कुल	20 प्रश्न पूछे जाएँगे, जिनमें से केवल 16 प्रश्नों के उत्तर देने होंगे		16			
	अ	शब्द निर्माण	8	10			
		उपसर्ग – 2 अंक, प्रत्यय – 2 अंक, समास – 4 अंक					
		उपसर्ग-प्रत्यय- (5 में से 4 प्रश्न करने होंगे), समास (5 में से 4 प्रश्न करने होंगे)					

ब	अर्थ की दृष्टि से वाक्य भेद – 4 अंक (5 में से 4 प्रश्न करने होंगे)	4	
स	अलंकार – ४ अंक	4	-
	(शब्दालंकार : अनुप्रास, यमक, श्लेष) (5 में से 4 प्रश्न करने होंगे)		
	खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)		
अ	गद्य खंड पाठ्यपुस्तक ( क्षितिज (भाग 1)	11	
	1 क्षितिज (भाग 1 )से निर्धारित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान	, 5	
	बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच बहुविकल्पी प्रश्न पूछे जाएँगे। (1x5	)	
	2 क्षितिज (भाग 1) से निर्धारित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति	f 6	-
	आदि पर तीन प्रश्न पूछे जाएँगे।(विकल्प सहित- 25-30 शब्द-सीमा वाले ४ में र	ने	
	3 प्रश्न करने होंगे) (2x3)		
ৰ	काव्य खंड पाठ्यपुस्तक (क्षितिज (भाग 1)	11	
	1 क्षितिज (भाग 1) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय	্য 5	30
	पाँच बहुविकल्पी प्रश्न पूछे जाएँगे (1x5)		
	2 क्षितिज (भाग 1 ) से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध	प 6	-
	परखने हेतु तीन प्रश्न पूछे जाएँगे। (विकल्प सहित-25-30 शब्द-सीमा वाले ४ म	Ť	
	से 3 प्रश्न करने होंगे) (2x3)		
स	पूरक पाठ्यपुस्तक (कृतिका भाग – 1)	8	
	कृतिका ( भाग 1) से निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे। (4x2	) 8	
	(विकल्प सहित-50-60 शब्द-सीमा वाले 3 में से 2 प्रश्न करने होंगे)		
	खंड – घ (रचनात्मक लेखन)		
लेख	न		
क	विभिन्न विषयों और संदर्भी पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमत	T 6	
	को परखने के लिए संकेत-बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन	Ŧ	
	से जुड़े हुए तीन विषयों में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेव	द	
	लेखन (6 x1 = 6)		20
ख	अभिव्यक्ति की क्षमता पर केंद्रित औपचारिक अथवा अनौपचारिक विषयों में लगभग	T 5	20
	100 शब्दों में किसी एक विषय पर पत्र। (5x1= 5)		
ग	विविध विषयों पर आधारित लगभग 100 शब्दों में ई-मेल लेखन। (5x1= 5)	5	1
	अथवा		
	स अ ब स स	स अलंकार – 4 अंक (शब्दालंकार : अनुप्रास, यमक, श्लेष) (5 में से 4 प्रश्न करने होंगे)  खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)  गद्य खंड पाठ्यपुस्तक (क्षितिज (भाग 1)  1 क्षितिज (भाग 1) से निर्धारित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच बहुविकल्पी प्रश्न पूछे जाएँगे। (1x5)  2 क्षितिज (भाग 1) से निर्धारित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर तीन प्रश्न पूछे जाएँगे। (विकल्प सिंहत- 25-30 शब्द-सीमा वाले 4 में से अप्रश्न करने होंगे) (2x3)  ब काव्य खंड पाठ्यपुस्तक (क्षितिज (भाग 1)  1 क्षितिज (भाग 1) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय पाँच बहुविकल्पी प्रश्न पूछे जाएँगे। (विकल्प सिंहत-25-30 शब्द-सीमा वाले 4 में से अप्रश्न करने होंगे) (2x3)  स पुरक पाठ्यपुस्तक (कृतिका भाग – 1)  कृतिका (भाग 1) से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध परखने हेतु तीन प्रश्न पूछे जाएँगे। (विकल्प सिंहत-25-30 शब्द-सीमा वाले 4 में से 3 प्रश्न करने होंगे) (2x3)  स पुरक पाठ्यपुस्तक (कृतिका भाग – 1)  कृतिका (भाग 1) से निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे। (4x2 (विकल्प सिंहत-50-60 शब्द-सीमा वाले 3 में से 2 प्रश्न करने होंगे)  खंड – घ (रचनात्मक लेखन)  लेखन  के विभिन्न विषयों और संदर्भों पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमत को परखने के लिए संकेत-बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन से जुड़े हुए तीन विषयों में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेत लेखन (6 x1 = 6)  ख अभिव्यक्ति की क्षमता पर केंद्रित औपचारिक अथवा अनौपचारिक विषयों में लगभग 100 शब्दों में किसी एक विषय पर पत्र। (5x1= 5)  ग विविध विषयों पर आधारित लगभग 100 शब्दों में ई-मेल लेखन। (5x1= 5)	स अलंकार - 4 अंक (शब्दालंकार : अनुप्रास, यमक, श्लेष) (5 में से 4 प्रश्न करने होंगे)  खंड - ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)  गद्य खंड पाठ्यपुस्तक (क्षितिज (भाग 1)  1 क्षितिज (भाग 1) से निधीरित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच बहुविकल्पी प्रश्न पूछे जाएँगे। (1x5)  2 क्षितिज (भाग 1) से निधीरित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर तीन प्रश्न पूछे जाएँगे।(विकल्प सहित- 25-30 शब्द-सीमा वाले 4 में से 3 प्रश्न करने होंगे) (2x3)  ब काव्य खंड पाठ्यपुस्तक (क्षितिज (भाग 1)  1 क्षितिज (भाग 1) से निधीरित कविताओं में से काव्यांश के आधार पर एक अंकीय पाँच बहुविकल्पी प्रश्न पूछे जाएँगे (1x5)  2 क्षितिज (भाग 1) से निधीरित कविताओं के आधार पर विद्यार्थियों का काव्यबोध परखने हेतु तीन प्रश्न पूछे जाएँगे। (विकल्प सहित-25-30 शब्द-सीमा वाले 4 में से 3 प्रश्न करने होंगे) (2x3)  स पूरक पाठ्यपुस्तक (कृतिका भाग - 1)  कृतिका (भाग 1) से निधीरित पाठों पर आधारित दो प्रश्न पूछे जाएँगे। (4x2) (विकल्प सहित-50-60 शब्द-सीमा वाले 3 में से 2 प्रश्न करने होंगे)  खंड - घ (रचनात्मक लेखन)  तेखन  क विभिन्न विषयों और संदर्भों पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमता को परखने के लिए संकेत-बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन से जुड़े हुए तीन विषयों में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेद लेखन (6 x1 = 6)  ख अभिव्यक्ति की क्षमता पर केंद्रित औपचारिक अथवा अनोपचारिक विषयों में लगभग 5 100 शब्दों में किसी एक विषय पर पत्र। (5x1= 5)

		दिए गए विषय/शीर्षक आदि के आधार पर लगभग 100 शब्दों में लघुकथा लेखन।		
		(5x1=5)		
	घ	दिए गए विषय/परिस्थिति के आधार पर लगभग 80 शब्दों में संवाद लेखन।	4	
		(4x1=4)		
		अथवा		
		व्यावहारिक जीवन से संबंधित विषयों पर आधारित लगभग 80 शब्दों में सूचना		
		लेखन। (4x1=4)		
_				
		कुल		80
		आंतरिक मूल्यांकन		<b>80</b> 20
	अ		5	
	अ ब	आंतरिक मूल्यांकन	5 5	
	_	आंतरिक मूल्यांकन सामयिक आकलन		
	ब	आंतरिक मूल्यांकन सामयिक आकलन बहुविध आकलन	5	

# निर्धारित पुस्तकें :

- 1. **क्षितिज, भाग-1,** एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण
- 2. **कृतिका, भाग–1,** एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण

# नोट – निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे–

क्षितिज, भाग – 1	काव्य खंड	• केदारनाथ अग्रवाल - चंद्र गहना से लौटती बेर (पूरा पाठ)
		• चंद्रकांत देवताले – यमराज की दिशा (पूरा पाठ)
	गद्य खंड	• चपला देवी – नाना साहब की पुत्री देवी मैना को भस्म कर दिया
		गया (पूरा पाठ)
		<ul> <li>हजारीप्रसाद द्विवेदी – एक कुत्ता और एक मैना (पूरा पाठ)</li> </ul>
कृतिका, भाग – 1	• विद्यासागर नौटियाल – माटी वाली (पूरा पाठ)	
	<ul> <li>शमशेर बहादुर सिंह – किस तरह आखिरकार मैं हिंदी में आया (पूरा पाठ)</li> </ul>	

# हिंदी पाठ्यक्रम -अ (कोड सं. 002) कक्षा 10वीं हिंदी - अ परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2024-25

खंड		भारांक
क	अपठित बोध	14
ख	व्यावहारिक व्याकरण	16
ग	पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक	30
घ	रचनात्मक लेखन	20

भारांक-{80(वार्षिक बोर्ड परीक्षा )+20 (आंतरिक परीक्षा)

निर्धारित समय- 3 घंटे भारांक-80

		वार्षिक बोर्ड परीक्षा हेतु भार विभाजन		
		खंड – क (अपठित बोध)		
		विषयवस्तु	उप भार	कुल भार
1		ठेत गद्यांश व काव्यांश पर बोध, चिंतन, विश्लेषण, सराहना आदि पर बहुविकल्पीय, लघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न		
	अ	एक अपठित गद्यांश लगभग 250 शब्दों का इसके आधार पर एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे जाएँगे	7	14
	ब	एक अपठित काव्यांश लगभग 120 शब्दों का इसके आधार पर एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3), अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे जाएँगे	7	
2	अति	रण के लिए निर्धारित विषयों पर विषयवस्तु का बोध, भाषिक बिंदु/ संरचना आदि पर लघूत्तरात्मक/लघूत्तरात्मक प्रश्न। (1x16) 20 प्रश्न पूछे जाएँगे, जिनमें से केवल 16 प्रश्नों के उत्तर देने होंगे)		
			-	
	1	रचना के आधार पर वाक्य भेद (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	16
	2	वाच्य (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	-
	3	पद परिचय (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	-
	4	अलंकार- (अर्थालंकार : उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति, मानवीकरण) (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	

3		खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)		
	अ	गद्य खंड पाठ्यपुस्तक (क्षितिज भाग 2 )	11	_
		1 क्षितिज (भाग 2 ) से निर्धारित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान,	5	-
		बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच <b>बहुविकल्पी प्रश्न</b> पूछे जाएँगे। (1x5)		
		2 क्षितिज (भाग 2 ) से निर्धारित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति	6	
		आदि पर तीन प्रश्न पूछे जाएँगे।(विकल्प सहित- 25-30 शब्द-सीमा वाले 4 में से 3		
		प्रश्न करने होंगे) (2x3)		
	ৰ	काव्य खंड (पाठ्यपुस्तक) (क्षितिज भाग २ )	11	30
		1 क्षितिज(भाग 2 ) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय	5	
		पाँच <b>बहुविकल्पी प्रश्न</b> पूछे जाएँगे (1x5)		
		2 क्षितिज (भाग 2 ) से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध	6	
		परखने हेतु तीन प्रश्न पूछे जाएँगे। (विकल्प सहित-25-30 शब्द-सीमा वाले 4 में से		
		3 प्रश्न करने होंगे) (2x3)		
	स	पूरक पाठ्यपुस्तक (कृतिका भाग – 2)	8	
		कृतिका (भाग 2 ) से निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे। (4x2)	8	
		(विकल्प सहित-50-60 शब्द-सीमा वाले 3 में से 2 प्रश्न करने होंगे)		
4		खंड – घ (रचनात्मक लेखन)		
	i	विभिन्न विषयों और संदर्भी पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमता	6	
		को परखने के लिए संकेत-बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन		
		से जुड़े हुए तीन विषयों में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेद		
		लेखन (6 x1 = 6)		
	ii	अभिव्यक्ति की क्षमता पर केंद्रित औपचारिक अथवा अनौपचारिक विषयों में से किसी	5	20
		एक विषय पर लगभग 100 शब्दों में पत्र (5 x 1= 5)		
	iii	रोजगार से संबंधित रिक्तियों के लिए लगभग 80 शब्दों में स्ववृत्त लेखन (5 x 1= 5)	5	
		अथवा		
		विविध विषयों पर आधारित लगभग 80 शब्दों में ई-मेल लेखन (5 x 1= 5)		
	iv	विषय से संबंधित लगभग 40 शब्दों के अंतर्गत विज्ञापन लेखन (4 x 1 = 4)	4	
		अथवा		

	संदेश लेखन लगभग 40 शब्दों में (शुभकामना, पर्व-त्योहारों एवं विशेष अवसरों पर		
	दिए जाने वाले संदेश) (4 x 1 = 4)		
	कुल		80
	आंतरिक मूल्यांकन	अंक	20
अ	सामयिक आकलन	5	
ब	बहुविध आकलन	5	
स	पोर्टफ़ोलियो	5	
द	श्रवण एवं वाचन	5	
	कुल		100

### निर्धारित पुस्तकें :

- 1. **क्षितिज, भाग–2,** एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण
- 2. **कृतिका, भाग–2,** एन.सी.ई.आर.टी., नई दिल्ली द्वारा प्रकाशित नवीनतम संस्करण

## नोट – निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे–

क्षितिज, भाग – 2	काव्य खंड	• देव- सवैया, कवित्त (पूरा पाठ)	
		• गिरिजाकुमार माथुर – छाया मत छूना (पूरा पाठ)	
		• ऋतुराज – कन्यादान (पूरा पाठ)	
	गद्य खंड	<ul> <li>महावीरप्रसाद द्विवेदी – स्त्री-शिक्षा के विरोधी कुतर्कों का खंडन (पूरा</li> </ul>	
		पाठ)	
		<ul> <li>सर्वेश्वर दयाल सक्सेना- मानवीय करुणा की दिव्य चमक (पूरा पाठ)</li> </ul>	
कृतिका, भाग – 2	<ul> <li>एई</li> </ul>	ी ठैयाँ झुलनी हेरानी हो रामा! (पूरा पाठ)	
	• जा	जार्ज पंचम की नाक (पूरा पाठ)	

कक्षा दसवीं हेतु प्रश्न पत्र का विस्तृत प्रारूप जानने के लिए कृपया बोर्ड द्वारा जारी आदर्श प्रश्न पत्र देखें।

### MATHEMATICS (IX-X) (CODE NO. 041) Session 2024-25

The Syllabus in the subject of Mathematics has undergone changes from time to time in accordance with growth of the subject and emerging needs of the society. The present revised syllabus has been designed in accordance with National Curriculum Framework 2005 and as per guidelines given in the Focus Group on Teaching of Mathematics which is to meet the emerging needs of all categories of students. For motivating the teacher to relate the topics to real life problems and other subject areas, greater emphasis has been laid on applications of various concepts.

The curriculum at Secondary stage primarily aims at enhancing the capacity of students to employ Mathematics in solving day-to-day life problems and studying the subject as a separate discipline. It is expected that students should acquire the ability to solve problems using algebraic methods and apply the knowledge of simple trigonometry to solve problems of height and distances. Carrying out experiments with numbers and forms of geometry, framing hypothesis and verifying these with further observations form inherent part of Mathematics learning at this stage. The proposed curriculum includes the study of number system, algebra, geometry, trigonometry, mensuration, statistics, graphs and coordinate geometry, etc.

The teaching of Mathematics should be imparted through activities which may involve the use of concrete materials, models, patterns, charts, pictures, posters, games, puzzles and experiments.

#### **Objectives**

The broad objectives of teaching of Mathematics at secondary stage are to help the learners to:

- consolidate the Mathematical knowledge and skills acquired at the upper primary stage;
- acquire knowledge and understanding, particularly by way of motivation and visualization, of basic concepts, terms, principles and symbols and underlying processes and skills;
- develop mastery of basic algebraic skills;
- develop drawing skills;
- feel the flow of reason while proving a result or solving a problem;
- apply the knowledge and skills acquired to solve problems and wherever possible, by more than one method;
- to develop ability to think, analyze and articulate logically;
- to develop awareness of the need for national integration, protection of environment, observance of small family norms, removal of social barriers, elimination of gender biases;
- to develop necessary skills to work with modern technological devices and mathematical software's.
- to develop interest in mathematics as a problem-solving tool in various fields for its beautiful structures and patterns, etc.
- to develop reverence and respect towards great Mathematicians for their contributions to the field of Mathematics;
- to develop interest in the subject by participating in related competitions;
- to acquaint students with different aspects of Mathematics used in daily life;
- to develop an interest in students to study Mathematics as a discipline.

#### **COURSE STRUCTURE CLASS -IX**

Units	Unit Name	Marks
1	NUMBER SYSTEMS	10
Ш	ALGEBRA	20
III	COORDINATE GEOMETRY	04
IV	GEOMETRY	27
V	MENSURATION	13
VI	STATISTICS	06
	Total	80

#### **UNIT I: NUMBER SYSTEMS**

#### 1. REAL NUMBERS

(18) Periods

- 1. Review of representation of natural numbers, integers, and rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers.
- 2. Examples of non-recurring/non-terminating decimals. Existence of non-rational numbers (irrational numbers) such as  $\sqrt{2}$ ,  $\sqrt{3}$  and their representation on the number line. Explaining that every real number is represented by a unique point on the number line and conversely, viz. every point on the number line represents a unique real number.
- 3. Definition of nth root of a real number.
- 4. Rationalization (with precise meaning) of real numbers of the type  $\frac{1}{a+b\sqrt{x}}$  and  $\frac{1}{\sqrt{x}+\sqrt{y}}$  (and their combinations) where x and y are natural number and a and b are integers.
- 5. Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws.)

#### **UNIT II: ALGEBRA**

### 1. POLYNOMIALS (26) Periods

Definition of a polynomial in one variable, with examples and counter examples. Coefficients of a polynomial, terms of a polynomial and zero polynomial. Degree of a polynomial. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples. Zeros of a polynomial. Motivate and State the Remainder Theorem with examples. Statement and proof of the Factor Theorem. Factorization of  $ax^2 + bx + c$ ,  $a \ne 0$  where a, b and c are real numbers, and of cubic polynomials using the Factor Theorem.

Recall of algebraic expressions and identities. Verification of identities:

$$(x + y + z)^{2} = x^{2} + y^{2} + z^{2} + 2xy + 2yz + 2zx$$

$$(x \pm y)^{3} = x^{3} \pm y^{3} \pm 3xy (x \pm y)$$

$$x^{3} \pm y^{3} = (x \pm y) (x^{2} \mp xy + y^{2})$$

$$x^{3} + y^{3} + z^{3} - 3xyz = (x + y + z) (x^{2} + y^{2} + z^{2} - xy - yz - zx)$$

and their use in factorization of polynomials.

#### 2. LINEAR EQUATIONS IN TWO VARIABLES

(16) Periods

Recall of linear equations in one variable. Introduction to the equation in two variables. Focus on linear equations of the type ax + by + c=0. Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they lie on a line.

#### UNIT III: COORDINATE GEOMETRY

#### **COORDINATE GEOMETRY**

(7) Periods

The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations.

#### **UNIT IV: GEOMETRY**

#### 1. INTRODUCTION TO EUCLID'S GEOMETRY

(7) Periods

History - Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomenon into rigorous Mathematics with definitions, common/obvious notions, axioms/postulates and theorems. The five postulates of Euclid. Showing the relationship between axiom and theorem, for example:

(Axiom) 1. Given two distinct points, there exists one and only one line through them. (Theorem) 2. (Prove) Two distinct lines cannot have more than one point in common.

#### 2. LINES AND ANGLES

(15) Periods

- 1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and the converse.
- 2. (Prove) If two lines intersect, vertically opposite angles are equal.
- 3. (Motivate) Lines which are parallel to a given line are parallel.

#### 3. TRIANGLES (22) Periods

- 1. (Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence).
- 2. (Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence).

- 3. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
- 4. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence)
- 5. (Prove) The angles opposite to equal sides of a triangle are equal.
- 6. (Motivate) The sides opposite to equal angles of a triangle are equal.

#### 4. QUADRILATERALS

(13) Periods

- 1. (Prove) The diagonal divides a parallelogram into two congruent triangles.
- 2. (Motivate) In a parallelogram opposite sides are equal, and conversely.
- 3. (Motivate) In a parallelogram opposite angles are equal, and conversely.
- 4. (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.
- 5. (Motivate) In a parallelogram, the diagonals bisect each other and conversely.
- 6. (Motivate) In a triangle, the line segment joining the mid points of any two sides is parallel to the third side and in half of it and (motivate) its converse.

5. CIRCLES (17) Periods

- 1.(Prove) Equal chords of a circle subtend equal angles at the center and (motivate) its converse.
- 2.(Motivate) The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord.
- 3. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the center (or their respective centers) and conversely.
- 4.(Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle.
- 5.(Motivate) Angles in the same segment of a circle are equal.
- 6.(Motivate) If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle.
- 7.(Motivate) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.

#### **UNIT V: MENSURATION**

1. AREAS (5) Periods

Area of a triangle using Heron's formula (without proof)

#### 2. SURFACE AREAS AND VOLUMES

(17) Periods

Surface areas and volumes of spheres (including hemispheres) and right circular cones.

#### **UNIT VI: STATISTICS**

STATISTICS (15) Periods

Bar graphs, histograms (with varying base lengths), and frequency polygons.

#### MATHEMATICS QUESTION PAPER DESIGN CLASS – IX (2024-25)

Time: 3 Hrs. Max. Marks: 80

S. No.	Typology of Questions	Total Marks	% Weightage (approx.)
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.  Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	43	54
2	<b>Applying:</b> Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	19	24
	Analysing:  Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations		
3	Evaluating: Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	18	22
	Creating:		
	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions		
	Total	80	100

INTERNAL ASSESSMENT	20 MARKS
Pen Paper Test and Multiple Assessment (5+5)	10 Marks
Portfolio	05 Marks
Lab Practical (Lab activities to be done from the prescribed books)	05 Marks

#### **COURSE STRUCTURE CLASS -X**

Units	Unit Name	Marks
1	NUMBER SYSTEMS	06
Ш	ALGEBRA	20
III	COORDINATE GEOMETRY	06
IV	GEOMETRY	15
V	TRIGONOMETRY	12
VI	MENSURATION	10
VII	STATISTICS & PROBABILTY	11
	Total	80

#### **UNIT I: NUMBER SYSTEMS**

1. REAL NUMBER (15) Periods

Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples, Proofs of irrationality of  $\sqrt{2}$ ,  $\sqrt{3}$   $\sqrt{5}$ 

#### **UNIT II: ALGEBRA**

#### 1. POLYNOMIALS (8) Periods

Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials.

#### 2. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES (15) Periods

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency.

Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination. Simple situational problems.

#### 3. QUADRATIC EQUATIONS

(15) Periods

Standard form of a quadratic equation  $ax^2 + bx + c = 0$ ,  $(a \ne 0)$ . Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots.

Situational problems based on quadratic equations related to day to day activities to be incorporated.

#### 4. ARITHMETIC PROGRESSIONS

(10) Periods

Motivation for studying Arithmetic Progression Derivation of the n<sup>th</sup> term and sum of the first n terms of A.P. and their application in solving daily life problems.

#### UNIT III: COORDINATE GEOMETRY

#### **Coordinate Geometry**

(15) Periods

**Review:** Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division).

#### **UNIT IV: GEOMETRY**

1. TRIANGLES (15) Periods

Definitions, examples, counter examples of similar triangles.

- 1. (Prove) If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.
- 2. (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.
- 3. (Motivate) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.
- 4. (Motivate) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.
- 5. (Motivate) If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.

#### 2. CIRCLES (10) Periods

Tangent to a circle at, point of contact

- 1. (Prove) The tangent at any point of a circle is perpendicular to the radius through the point of contact.
- 2. (Prove) The lengths of tangents drawn from an external point to a circle are equal.

#### **UNIT V: TRIGONOMETRY**

#### 1. INTRODUCTION TO TRIGONOMETRY

(10) Periods

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined); motivate the ratios whichever are defined at  $0^{\circ}$  and  $90^{\circ}$ . Values of the trigonometric ratios of  $30^{\circ}$ ,  $45^{\circ}$  and  $60^{\circ}$ . Relationships between the ratios.

#### 2. TRIGONOMETRIC IDENTITIES

(15) Periods

Proof and applications of the identity  $sin^2A + cos^2A = 1$ . Only simple identities to be given.

#### 3. HEIGHTS AND DISTANCES: Angle of elevation, Angle of Depression. (10)Periods

Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30°, 45°, and 60°.

#### **UNIT VI: MENSURATION**

#### 1. AREAS RELATED TO CIRCLES

(12) Periods

Area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60°, 90° and 120° only.

#### 2. SURFACE AREAS AND VOLUMES

(12) Periods

Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones.

#### UNIT VII: STATISTICS AND PROBABILITY

1. STATISTICS (18) Periods

Mean, median and mode of grouped data (bimodal situation to be avoided).

#### 2. PROBABILITY (10) Periods

Classical definition of probability. Simple problems on finding the probability of an event.

### MATHEMATICS-Standard QUESTION PAPER DESIGN CLASS – X (2024-25)

Time: 3 Hours Max. Marks: 80

S. No.	Typology of Questions	Total Marks	% Weightage (approx.)
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.  Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	43	54
2	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	19	24
3	Analysing:  Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations  Evaluating:  Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.  Creating:  Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	18	22
	Total	80	100

INTERNAL ASSESSMENT	20 MARKS
Pen Paper Test and Multiple Assessment (5+5)	10 Marks
Portfolio	05 Marks
Lab Practical (Lab activities to be done from the prescribed books)	05 Marks

#### MATHEMATICS-Basic QUESTION PAPER DESIGN CLASS – X (2024-25)

Time: 3Hours Max. Marks: 80

S. No.	Typology of Questions	Total Marks	% Weightage (approx.)
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.  Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	60	75
2	<b>Applying:</b> Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	12	15
3	Analysing:  Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations  Evaluating:  Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.  Creating:  Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	8	10
	Total	80	100

INTERNAL ASSESSMENT	20 MARKS
Pen Paper Test and Multiple Assessment (5+5)	10 Marks
Portfolio	05 Marks
Lab Practical (Lab activities to be done from the prescribed books)	05 Marks

#### PRESCRIBED BOOKS:

- 1. Mathematics Textbook for class IX NCERT Publication
- 2. Mathematics Textbook for class X NCERT Publication
- 3. Guidelines for Mathematics Laboratory in Schools, class IX CBSE Publication
- 4. Guidelines for Mathematics Laboratory in Schools, class X CBSE Publication
- 5. Laboratory Manual Mathematics, secondary stage NCERT Publication
- 6. Mathematics exemplar problems for class IX, NCERT publication.
- 7. Mathematics exemplar problems for class X, NCERT publication.

#### कक्षा - नवमी

### संस्कृतम् कोड-सङ्ख्या-122

पाठ्यक्रमः परीक्षानिर्देशाश्च (2024-25)

भाष्यते व्यवहारादिषु प्रयुज्यते इति भाषा, मानवः स्वमनिस विद्यमानान् विचारान् भावनाः अनुभूतिं च अर्थयुक्तैः ध्वनिभिः लिखितसङ्केतैः च व्यक्तीकरोति सा भाषा। भाषा अभिप्रायप्रकटनस्य साधनम्। वस्तुतः लोके द्वयोः मनुष्ययोः मध्ये परस्परम् अवबोधनाय, भावप्रहणाय, भावविनिमयाय च भाषया विना न अन्यत् स्पष्टतमं सरलतमं च साधनं विद्यते। लोके बहव्यः भाषाः सन्ति यासु संस्कृतभाषा अतिप्राचीनतमा समृद्धा च अस्ति। संस्कृतभाषायाम् एव सन्ति ऋग्यजुस्सामाथर्वाः चत्वारः वेदाः, शिक्षा, व्याकरणं, निरुक्तं, ज्योतिषं, छन्दः कल्पः चेति षडङ्गानि, चतुर्दशविद्याः, विज्ञानम्, आयुर्वेदः, योगशास्त्रादयः ग्रन्थाः। अतः संस्कृतं केवलं भाषा न अपितु किञ्चन जीवनदर्शनम् इति। इयं विद्या (भाषा) भारतीयानां प्रतिष्ठात्मिका कामधेनुः समस्तज्ञानप्रदात्री, ऐक्यप्रदात्री, धर्मार्थकाममोक्षप्रदात्री च अस्ति। सृष्टेः आदितः अद्यावधिः यत् शिक्षणं ज्ञानविज्ञानं च अस्ति तत् सर्वं अस्यां भाषायामेव सिन्निहितम् अस्ति। अतिसूक्ष्मभावनां प्रकटियतुं स्पष्टीकर्तुं संस्कृतं विना नैव अन्यत्र विद्यते सामर्थ्यम्। भारतीयं सर्वस्वं विश्वस्य समग्रं तत्त्वं च अस्यां भाषायाम् अस्ति।

संस्कृतस्य भाषावैज्ञानिकत्त्वम् – ऐतिहासिक-वर्णनात्मक-तुलनात्मकाध्ययन-द्वारा भाषायाः प्रकृतेः विकासोत्पत्तेः संरचनायाः अध्ययनपूर्वकं सर्वेषां विषयाणां सैद्धान्तिकः निर्णयः भाषाविज्ञानेन क्रियते। भाषाविज्ञान-नामकशास्त्रे शब्दानाम् उत्पत्तिः, वाक्यानां संरचना इत्यादीनां विषयाणां विचारः क्रियते। भाषाविज्ञानस्य सम्बन्धः सर्वेषां मानवानां भाषाभिः सह अस्ति। एवं भाषाविज्ञाने ध्वनेः, ध्वनि-उच्चारणोपयोगिनां स्वरयन्त्रमुखजिह्वादि-अङ्गानां प्रकृति-प्रत्ययादीनां, संज्ञासर्वनाम-क्रिया-विशेषणादीनां नामाख्यात-उपसर्जनिनपातानां पदपदार्थविषयकानां विकारादीनां विकारमूलककारकाणाम् अन्येषां विविधविषयाणाञ्च अध्ययनं क्रियते। भाषाविज्ञाने संस्कृतभाषा-विषयक-वर्णोत्पत्ति-सिद्धान्तस्य अतीव वैज्ञानिकं निरूपणं कृतं वर्तते।

विश्वस्य सर्वासु भाषासु संस्कृतभाषा प्राचीनतमा अस्ति। प्रायः सर्वासु भाषासु संस्कृतपरकशब्दाः उपलभ्यन्ते। संस्कृतभाषा भारतीयभाषाणां जननी इति कथ्यते। सर्वासु भारतीयभाषासु संस्कृतभाषा अन्तर्लीना अस्ति इति सर्वे अङ्गीकुर्वन्ति।

भारतदेशः बहुभाषी देशोऽस्ति। अस्मिन् देशे अनेकतायाम् एकतावर्धिनी भाषेयं सामाजिकसमरसतायै जीवनविकासाय च आवश्यकी वर्तते। संस्कृतस्य सांस्कृतिकं महत्त्वं वर्णयन्तः विद्वांसः कथयन्ति "भारतस्य प्रतिष्ठे द्वे संस्कृतं संस्कृतिस्तथा, संस्कृतिमूलं संस्कृतम्, साहित्यं संस्कृतिवाहकञ्च इति।" एषा संस्कृतिः न केवलं भारतस्य अपि तु विश्वस्य मुकुटायमाना अस्ति। उक्तं च -

सत्यमहिंसादिगुणैः श्रेष्ठा विश्वबन्धुत्वशिक्षिका। विश्वशान्तिः सुखधात्री भारतीया हि संस्कृतिः॥ संस्कृते संस्कृतिर्ज्ञेया संस्कृते सकलाः कलाः। संस्कृते सकलं ज्ञानं संस्कृते किन्न विद्यते॥

एवं संस्कृतभाषा परिनिष्ठिता, दोषरिहता, सरला, गभीरा, यथार्था वैज्ञानिकी च भाषा अस्ति। सम्प्रति युगेस्मिन् प्रमुखैः उद्देश्यैः संस्कृतभाषा शिक्षणीया अस्ति।

#### शिक्षणोद्देश्यानि -

- \* वसुधैव-कुटुम्बकम् इति भावनाविकासः।
- भारतीयभाषाणां संरक्षणम्।

- संस्कृतभाषया सम्प्रेषणकौशलविकासः।
- \* परस्परं संस्कृतसम्भाषणेन भावविनिमयः।
- संस्कृत-भाषया एव संस्कृत-शिक्षणम्।
- श्रवण-भाषण-पठन-लेखनेति चतुर्णां भाषिक-कौशलानां विकासः ।
- \* बौद्धिकविकासपुरस्सरम् आध्यात्मिकनैतिकज्ञानम्।
- मानसिकविकासानन्दानुभूतिः रसानुभूतिश्च ।
- \* भारतीयसंस्कृतेः संरक्षणं ज्ञानवर्धनञ्च।
- आत्मानुशासनसंस्थापनार्थम्
- \* भाषाशिक्षणकौशलानि वर्धनाय नैपुण्यप्राप्तिः।
- \* परस्परं वार्तालापमाध्यमेन भावविनिमयः।
- \* संस्कृतसाहित्यस्य अध्ययनेन ज्ञानानन्दस्य अनुभूतिः।
- \* मानवजीवनस्य विकासपूर्वकं कल्याणम्।
- संस्कृतभाषया छात्राणां सर्वविधविकासः ।

#### शिक्षणप्रविधयः -

- संस्कृतमाध्यमेन सम्भाषणविधिना शनैः शनैः संस्कृतिशक्षणं सम्भविष्यित । गितवर्धनाय संस्कृताध्यापकैः धैर्येण स्वकीयाध्यापन-कार्यक्रमाणां नियोजनम् । रुचिकरभाषाभ्यासेन भाषिकोपलब्धिः । भाषिकाभ्यासाय वार्तालाप-कथाश्रवण-वादविवाद-संवाद-वर्णनपरकप्रतियोगिताभिः भाषाशिक्षणं कारियतुं शक्यते ।
- विभिन्नप्रामाणिकसंस्थानां कार्यक्रमाः साहित्यसामग्र्यश्च प्रयुज्य उत्तमशिक्षणं कर्तुं शक्यते ।
- \* संस्कृतभाषया उपलब्ध-दृश्य-श्रव्य-सामग्री-माध्यमेन भाषाभ्यासः।
- \* विभिन्नपाठ्यसामग्रीद्वारा शिक्षकः स्वकीयं शिक्षणकार्यं रुचिकरं कर्तुं शक्नोति।
- \* भाषाशिक्षकः छात्रान् स्नेहपूर्वकम् (आत्मीयभावेन) पाठयेत्।
- अद्यतनपूर्वकं साहित्यकोश-शब्दकोश-सन्दर्भग्रन्थानां सहायतया छात्राणां तत्परतावर्धनम् ।
- प्राचीनार्वाचीनयोर्मध्ये समन्वयस्थापनद्वारा नृतनशिक्षणविधिभिश्च संस्कृतशिक्षणम् ।

#### कौशलानि-

- श्रवणकौशलम् भावाधिग्रहणाय ध्वन्यात्मकं भाषायाः प्रथमं कौशलम् इदम् । अस्य साधनानि- गुरुमुखम्,
   आकाशवाणी, दूरवाणी, परिवारसदस्याः, समाजः, कक्ष्याः, ध्वनिमुद्रणयन्त्रम्, दूरदर्शनम् इत्यादीनि ।
- भाषणकौशलम्- भावाभिव्यक्तये ध्वन्यात्मकं भाषायाः इदं द्वितीयं कौशलम्। वाग्-रूपं भावप्रकटनम् एव भाषणम्, परिसरप्रभावेण आधारेण वा भाषणशक्तिः जायते।
- पठनकौशलम् भावाधिग्रहणाय लिप्यात्मकं भाषायाः तृतीयं कौशलम् इदम्। (अर्थग्रहणपूर्वकं स्पष्टरूप-वाचनम् इत्यर्थः)
- लेखनकौशलम्- भावाभिव्यक्तये लिप्यात्मकं भाषायाः चतुर्थं कौशलम् इदम्। (ध्वनिरूपे विद्यमानं भाषांशं लिपिरूपे अवतारणं लेखनम् इति उच्यते)
- ज्ञानात्मक-अवबोधनात्मक-अनुप्रयोगात्मक-विश्लेषणात्मक-संश्लेषणात्मक-मूल्याङ्कनात्मक-लक्षिताधिगमनविशेषाः ।

## कक्षा - नवमी (202**4**-25) संस्कृतम् (कोड़ नं.- 122)

आहत्य-अङ्काः - 80+20

आहत्य-कालांशाः - 200

वार्षिकमूल्याङ्कनाय निर्मिते प्रश्नपत्रे चत्वारः खण्डाः भविष्यन्ति –

'क' खण्डः अपठितावबोधनम् 10 अङ्काः 25 कालांशाः 'ख' खण्डः रचनात्मककार्यम् 15 अङ्काः 40 कालांशाः 'ग' खण्डः अनुप्रयुक्तव्याकरणम् 25 अङ्काः 55 कालांशाः 'घ' खण्डः पठितावबोधनम् 30 अङ्काः 80 कालांशाः

खण्डानुसारं विषयाः मूल्यभारः च

क्र. सं.	विषयाः	प्रश्नप्रकाराः	मूल्यभारः			
	'ক' खण्डः					
	अपठिताव	बोधनम् 10 अङ्काः				
1.	एकः गद्यांशः (80-100) शब्दपरिमितः)	अति-लघूत्तरात्मकौ	1×2=2			
		पूर्णवाक्यात्मकौ	2×2=4			
		शीर्षकम् (लघूत्तरात्मकः)	1×1=1			
		भाषिककार्यम् (बहुविकल्पात्मकाः)	1×3=3			
		पूर्णभारः	10 अङ्काः			
	'ख' ख	ण्ड:				
	रचनात्मव	क्कार्यम् 15 अङ्काः				
2.	औपचारिकम् अथवा अनौपचारिकं पत्रम्	निबन्धात्मकः	5			
	(पूर्णं पत्रं लेखनीयम्)					
3.	चित्रवर्णनम् अथवा अनुच्छेदलेखनम्	पूर्णवाक्यात्मकाः / निबन्धात्मकः	1×5=5			
4.	हिन्दी/आङ्ग्लभाषातः संस्कृतेन अनुवादः	पूर्णवाक्यात्मकः	1×5=5			
		पूर्णभारः	15 अङ्गाः			
	'ग' ख	ण्ड:	•			
	अनुप्रयुक्तव	याकरणम् 25 अङ्काः				
5.	सन्धिः	लघूत्तरात्मकाः	1×4=4			
6.	शब्दरूपाणि	बहुविकल्पात्मकाः	1×4=4			
7.	धातुरूपाणि	बहुविकल्पात्मकाः	1×4=4			
8.	कारक-उपपदविभक्तयः	बहुविकल्पात्मकाः	1×4=4			

9.	प्रत्ययाः	बहुविकल्पात्मकाः	1×3=3
10.	सङ्ख्याः	लघूत्तरात्मकाः	½×4=2
11.	उपसर्गाः	लघूत्तरात्मकाः	½×4=2
12.	अव्ययानि	बहुविकल्पात्मकौ	1×2=2
		पूर्णभारः	25 अङ्गाः
	'घ' ख	व्यप्ड:	-
	पठिताव	बोधनम् 30 अङ्गाः	
13.	गद्यांशः	अति-लघूत्तरात्मकौ	½×2=1
		पूर्णवाक्यात्मकौ	1×2=2
		लघूत्तरात्मकौ (भाषिककार्यम्)	1×2=2
14.	पद्यांशः	अति-लघूत्तरात्मकौ	½×2=1
		पूर्णवाक्यात्मकौ	1×2=2
		लघूत्तरात्मकौ (भाषिककार्यम्)	1×2=2
15.	नाट्यांशः	अति-लघूत्तरात्मकौ	½×2=1
		पूर्णवाक्यात्मकौ	1×2=2
		लघूत्तरात्मकौ (भाषिककार्यम्)	1×2=2
16.	प्रश्ननिर्माणम्	पूर्णवाक्यात्मकाः	1×4=4
17.	अन्वयः अथवा भावार्थः	निबन्धात्मकः	3
18.	घटनाक्रमानुसारं वाक्यलेखनम्	निबन्धात्मकः	½×8=4
19.	(क) प्रसङ्गानुसारम् अर्थस्य लेखनम्	लघूत्तरात्मकाः	½×4=2
	(ख) शब्दानाम् अर्थैः सह मेलनम्	लघूत्तरात्मकाः	½×4=2
		पूर्णभारः	30 अङ्काः

सम्पूर्णभारः 80 अङ्काः

## प्रश्नपत्र-प्रारूपम् /संरचना कक्षा – नवमी (2024-25) संस्कृतम् (कोड् सङ्ख्या – 122)

प्रश्नप्रकारः	प्रश्नानां सङ्ख्या	विभाग-सङ्ख्या	प्रतिप्रश्नम् अङ्कभारः	आहत्याङ्काः
अति-लघूत्तरात्मकाः ½ अङ्कः	2+2+2=6	3	1/2	3
अति-लघूत्तरात्मकाः 1 अङ्गः	2=2	1	1	2
बहुविकल्पात्मकाः 1 अङ्कः	3+4+4+4=18	5	1	18
लघूत्तरात्मकाः ½ अङ्गः	4+4+4+4=20	5	1/2	10
लघूत्तरात्मकाः 1 अङ्कः	2+2+2+1+4=11	5	1	11
दीर्घोत्तरात्मकाः ½ अङ्कः	8=8	1	1/2	4
दीर्घोत्तरात्मकाः 1 अङ्कः	5+5+2+2+2+4=20	6	1	20
दीर्घोत्तरात्मकाः 2 अङ्कौ	2=2	1	2	4
निबन्धात्मकाः 3 अङ्काः	1=1	1	3	3
निबन्धात्मकाः 5 अङ्काः	1=1	1	5	5
			आहत्याङ्काः	80

## संस्कृतपाठ्यक्रमः (कोड़ नं. 122) कक्षा – नवमी (202**4**-2**5**) वार्षिकं मूल्याङ्कनम्

	'क' खण्डः		
	अपठितावबोधन	म्	(10 अङ्काः)
1.	एकः अपठितः गद्यांशः		10
	80-100 शब्दपरिमितः गद्यांशः, सरलकथा वर्णनं वा		
	<ul><li>एकपदेन पूर्णवाक्येन च अवबोधनात्मकं कार्यम्</li></ul>	(2+4)	
	<ul><li>शीर्षकलेखनम्</li></ul>	(1)	
	🗲 अनुच्छेद – आधारितं भाषिकं कार्यम्	(3)	
भा	षेककार्याय तत्त्वानि -		
	<ul><li>✓ वाक्ये कर्तृ-क्रियापदचयनम्</li></ul>		
	🗸 कर्तृ-क्रिया-अन्वितिः		
	<ul><li>✓ विशेषण-विशेष्यचयनम्</li></ul>		
	<ul> <li>✓ पर्याय-विलोमपदचयनम्</li> </ul>		
	<ul> <li>✓ सर्वनामस्थाने संज्ञाप्रयोगः</li> </ul>		
	'ख' खण्डः		
	रचनात्मककार	र्मि	(15 अङ्काः)
2	2 औपचारिकम् अथवा अनौपचारिकं पूर्णपत्रलेखनम्		
	सम्भावितविषयाः –		
<ul><li>औपचारिकम्</li></ul>			
अवकाशार्थम्, स्वच्छतायै स्वास्थ्यविभागाय, विद्युद्विभागाय, वित्तकोषाय,			
	आरक्षकालयाय, प्रकाशकाय इत्यादयः।		
	🕨 अनौपचारिकम्-		
पित्राभ्याम्, वर्धापनपत्रम्, निमन्त्रणपत्रम्, परिणामसूचनापत्रम् इत्यादय।			
3.	चित्राधारितं वर्णनम् अथवा अनुच्छेदलेखनम्		5
	(मञ्जूषायाः सहायतया चित्रवर्णनम् अनुच्छेदलेखनं वा करर्ण	ोयम्)	
4.	हिन्दीभाषायाम् आङ्ग्लभाषायां वा लिखितानां पञ्चवाक्यानां	संस्कृतभाषायाम् अनुवादः	5
	'ग' खण्ड	:	
	अनुप्रयुक्तव्याक	रणम्	(25 अङ्काः)
5.			
	<ul> <li>स्वरसन्धिः - दीर्घः, गुण, वृद्धिः, यण्, अयादि</li> </ul>		
<ul><li>व्यञ्जनसन्धिः –जश्त्वसन्धिः, 'म्' स्थाने अनुस्वारः</li></ul>			
	<ul><li>विसर्गसिन्धः – उत्वम्, रत्वम्</li></ul>		
	·		1

6. शब्दरूपाणि		4
	अकारान्तपुँल्लिङ्गशब्दाः – बालकवत्	7
	इकारान्तपुँल्लिङ्गशब्दाः – कविवत्	
	उकारान्तपुँल्लिङ्गशब्दाः – साधुवत्	
>	ऋकारान्तपुँल्लिङ्गशब्दाः – पितृवत्	
	अकारान्तस्त्रीलिङ्गशब्दाः - लतावत्	
	ईकारान्तस्त्रीलिङ्गशब्दाः – नदीवत्	
	ऋकारान्तस्त्रीलिङ्गशब्दाः – मातृवत्	
	हलन्ताः - राजन्, भवत्, विद्वस्, गुणिन्	
	सर्वनामशब्दाः – अस्मद्, युष्मद्, तत्, इदम्, किम् (त्रिषु लिङ्गेषु)	
	राजनामराज्याः – अरमप्, प्राप्, राष्, ३५म्, भिर्म् (भिर्मु रिप्तिनु)	4
7. धातुरूपाणि		7
>	पठ्, गम्, वद्, भू, क्रीड्, नी, दृश्, शक्, ज्ञा, अस्, कृ, दा, क्री, श्रु,	
	पा (पिब्), सेव्, लभ् (पञ्चसु लकारेषु)	
8. कारक-उपप		4
	द्वितीया – उभयतः, धिक्, परितः, समया, निकषा, प्रति, विना	
	तृतीया – सह, साकम्, समम्, सार्धम्, विना, अलम्, सदृश, हीन	
>	चतुर्थी – रुच्, दा (यच्छ्), नमः, कुप्, स्वस्ति	
>	पञ्चमी – विना, बहिः, भी, रक्ष्, ऋते	
>	षष्ठी – उपरि, अधः, पुरतः, पृष्ठतः, निर्धारणे	
>	सप्तमी- स्निह्, निपुणः, विश्वस्, पटु।	
9. प्रत्ययाः		3
>	क्त्वा क्त्वा, तुमुन्, ल्यप्, क्तवतु, शतृ, शानच्, क्त	S
   10. सङ्ख्या –	1-100 (1-4 केवलं प्रथमा-विभक्तौ)	2
11. उपसर्गाः (		2
12. अव्ययानि		2
>	स्थानबोधकानि – अत्र, तत्र, अन्यत्र, सर्वत्र, यत्र, एकत्र, उभयत्र	
>	कालबोधकानि – यदा,तदा, सर्वदा, एकदा, पुरा, अधुना, अद्य,श्वः,ह्यः	
>	प्रश्नबोधकानि – किम्,कुत्र,कित,कदा,कुतः,कथम्, किमर्थम्	
>	अन्यानि – च, अपि, यदि, तर्हि, यथा, तथा, सम्यक्, एव	
	<u> </u>	
	पठितावबोधनम्	(30 अङ्काः)
13. गद्यांशम अ	धिकृत्य अवबोधनात्मकं कार्यम्	5
`	: – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि	3
भाषिकका		
ात नगर्यं	भग् – बाक्ये कर्तृ-क्रियापदचयनम्	
	<ul> <li>विशेषण-विशेष्यचयनम्</li> </ul>	
	र । यरावनानायराच्यायप्राम्	

<ul><li>पर्याय-विलोमपचयनम्</li></ul>	
14. पद्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम्	5
प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि	
भाषिककार्यम् –	
<ul><li>वाक्ये कर्तृ-क्रियापदचयनम्</li></ul>	
<ul><li>विशेषण-विशेष्यचयनम्</li></ul>	
<ul><li>पर्याय-विलोमपचयनम्</li></ul>	
15. नाट्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम्	5
प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि	
भाषिककार्यम् –	
<ul><li>वाक्ये कर्तृ-क्रियापदचयनम्</li></ul>	
<ul><li>विशेषण-विशेष्यचयनम्</li></ul>	
<ul><li>पर्याय-विलोमपचयनम्</li></ul>	
16. वाक्येषु रेखाङ्कितपदानि अधिकृत्य उचितप्रश्ननिर्माणम्	4
17. श्लोकान्वयः/ एकस्य श्लोकस्य संस्कृतेन भावार्थलेखनम्	3
18. घटनाक्रमानुसारं कथालेखनम्	4
19. (क) प्रसङ्गानुसारम् अर्थलेखनम्	2
(ख) शब्दानाम् अर्थैः सह मेलनम्	2
(पाठान् आधृत्य लघूत्तरात्मकाः प्रश्नाः)	

आहत्याङ्काः - 80

### परीक्षायै निर्धारिताः पाठाः

	<del>-</del>	
पाठसङ्ख्या	पाठनाम	
प्रथमः पाठः	भारतीवसन्तगीतिः	
द्वितीयः पाठः	स्वर्णकाक:	
तृतीयः पाठः	गोदोहनम्	
पञ्चमः पाठः	सूक्तिमौक्तिकम्	
षष्ठः पाठः	भ्रान्तो बालः	
नवमः पाठः	सिकतासेतुः	
दशमः पाठः	जटायोः शौर्यम्	
एकादशः पाठः पर्यावरणम्		
द्वादशः पाठः	वाङ्गनः प्राणस्वरूपम्	

### निर्धारित - पाठ्यपुस्तकानि -

- 1. 'शेमुषी' प्रथमो भागः, पाठ्यपुस्तकम् , संशोधितसंस्करणम् (प्रकाशनम् रा.शै.अनु.प्र.परि. द्वारा)
- 'अभ्यासवान् भव'-प्रथमो भागः व्याकरणपुस्तकम्
   (प्रकाशनम् रा.शै.अनु.प्र.परि. द्वारा)
- 'व्याकरणवीथिः'- व्याकरणपुस्तकम्
   (प्रकाशनम् रा.शै.अनु.प्र.परि. द्वारा)

### अवधेयम् -

\* अनुप्रयुक्तव्याकरणस्य अंशानां चयनं यथासम्भवं 'शेमुषी-प्रथमो भागः इति' पाठ्यपुस्तकात् करणीयम् । यदि ततः न सम्भवति तर्हि 'अभ्यासवान् भव-प्रथमो भागः' इत्यस्मात् कर्तुं शक्यम् ।

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## संस्कृतम् (कोड़ नं. 122)

### कक्षा - दशमी (202**4**-25)

वार्षिकमूल्याङ्कनाय निर्मिते प्रश्नपत्रे चत्वारः खण्डाः भविष्यन्ति -

'क' खण्डः अपठित-अवबोधनम् 10 अङ्काः 25 कालांशाः 'ख' खण्डः रचनात्मक-कार्यम् 15 अङ्काः 40 कालांशाः 'ग' खण्डः अनुप्रयुक्त-व्याकरणम् 25 अङ्काः 55 कालांशाः 'घ' खण्डः पठित-अवबोधनम् 30 अङ्काः 80 कालांशाः

खण्डानुसारं विषयाः मूल्यभारः च

क्र. सं.	विषयाः प्रश्नप्रकाराः		मूल्यभारः			
	'ক' खण्डः					
	अपठितावबोधनम् 10 अङ्काः					
1	एकः गद्यांशः	अति-लघूत्तरात्मकौ	1×2=2			
	80-100 शब्दपरिमितः	पूर्णवाक्यात्मकौ	$2 \times 2 = 4$			
		शीर्षकम् (लघूत्तरात्मकः)	1×1=1			
		भाषिककार्यम् (बहुविकल्पात्मकाः)	$1 \times 3 = 3$			
		सम्पूर्णभारः	10 अङ्काः			
	'ख' खण	ड:				
	रचनात्मक	कार्यम् 15 अङ्काः				
2.	औपचारिकम् अथवा अनौपचारिकं पत्रम्	निबन्धात्मकः	½×10=5			
	(मञ्जूषायाः सहायतया पूर्णं पत्रं लेखनीयम्)					
3.	चित्रवर्णनम् अथवा अनुच्छेदलेखनम्	निबन्धात्मकः	$1 \times 5 = 5$			
4.	हिन्दी/आङ्ग्लभाषातः संस्कृतेन अनुवादः	पूर्णवाक्यात्मकः				
	सम्पूर्णभारः		15 अङ्काः			
	'ग्' खण	ड:				
	अनुप्रयुक्तव्या	करणम् 25 अङ्काः				
5.	सन्धिः	लघूत्तरात्मकाः	1×4=4			
6.	समासः	बहुविकल्पात्मकाः	1×4=4			
7.	प्रत्ययाः	बहुविकल्पात्मकाः	1×4=4			
8.	वाच्यप्रकरणम्	बहुविकल्पात्मकाः	1×3=3			
9.	समय:	लघूत्तरात्मकाः	1×4=4			
10.	अव्ययपदानि	बहुविकल्पात्मकाः				
11.	11. संशोधनकार्यम् बहुविकल्पात्मकाः		1×3=3			
		सम्पूर्णभारः	25 अङ्काः			

	'घ' खण्डः				
	पठितावबोधनम् 30 अङ्काः				
12.	गद्यांशः	½×2=1			
		पूर्णवाक्यात्मकौ	1×2=2		
		लघूत्तरात्मकौ (भाषिककार्यम्)	1×2=2		
13.	पद्यांशः	अति-लघूत्तरात्मकौ	½×2=1		
		पूर्णवाक्यात्मकौ	1×2=2		
		लघूत्तरात्मकौ (भाषिककार्यम्)	1×2=2		
14.	नाट्यांशः	अति-लघूत्तरात्मकौ	½×2=1		
		पूर्णवाक्यात्मकौ	1×2=2		
		लघूत्तरात्मकौ (भाषिककार्यम्)	1×2=2		
15.	प्रश्ननिर्माणम्	पूर्णवाक्यात्मकाः	1×4=4		
16.	अन्वयः अथवा भावार्थः	पूर्णवाक्यात्मकाः	1×4=4		
17.	घटनाक्रमानुसारं वाक्यलेखनम्	पूर्णवाक्यात्मकाः	½×8=4		
18.	प्रसङ्गानुकूलम् अर्थलेखनम्	लघूत्तरात्मकाः	1×3=3		
		पूर्णभारः	30 अङ्गाः		

सम्पूर्णभारः - 80 अङ्काः

## प्रश्नपत्र-प्रारूपम् /संरचना कक्षा - दशमी (2024-25) संस्कृतम् कोड् सङ्ख्या - 122

प्रश्नप्रकारः	प्रश्नानां सङ्ख्या	विभाग-सङ्ख्या	प्रतिप्रश्नम्	आहत्याङ्काः
			अङ्कभारः	
अति-लघूत्तरात्मकाः ½ अङ्कः	2+2+2=6	3	1/2	3
अति-लघूत्तरात्मकाः 1 अङ्कः	2=2	1	1	2
बहुविकल्पात्मकाः 1 अङ्कः	3+4+4+3+3=17	5	1	17
लघूत्तरात्मकाः 1 अङ्गः	2+2+2+1+4+4+3+3=21	8	1	21
दीर्घोत्तरात्मकाः ½ अङ्कः	10+8=18	2	1/2	9
दीर्घोत्तरात्मकाः 1 अङ्गः	5+5+2+2+2+4+4=24	7	1	24
दीर्घोत्तरात्मकाः 2 अङ्कौ	2=2	1	2	4
			आहत्याङ्काः	80

## संस्कृतपाठ्यक्रमः (कोड़ नं. 122)

## कक्षा - दशमी (202**4**-25)

## वार्षिकं मूल्याङ्कनम्

## 80 अंकाः

'क' खण्डः		
अपठितावबोधनम्	(	(10 अङ्काः)
1. एकः अपठितः गद्यांशः		10
80-100 शब्दपरिमितः गद्यांशः, सरलकथा, वर्णनं वा	2+4+1	
<ul> <li>एकपदेन पूर्णवाक्येन च अवबोधनात्मकं कार्यम्</li> </ul>		
<ul><li>शीर्षकलेखनम्</li></ul>		
<ul><li>अनुच्छेद – आधारितं भाषिकं कार्यम्</li></ul>		
भाषिककार्याय तत्त्वानि -	3	
<ul> <li>✓ वाक्ये कर्तृ-क्रियापदचयनम्</li> </ul>		
<ul><li>✓ कर्तृ-क्रिया-अन्वितिः</li></ul>		
<ul><li>✓ विशेषण-विशेष्यचयनम्</li></ul>		
✓ पर्याय-विलोमपदचयनम्		
'ख' खण्डः		
रचनात्मककार्यम्		(15 अङ्काः)
2. सङ्केताधारितम् औपचारिकम् अथवा अनौपचारिकं पत्रलेखनम्		5
3. चित्राधारितं वर्णनम् अथवा अनुच्छेदलेखनम्		
4. हिन्दीभाषायाम् आङ्ग्लभाषायां वा लिखितानां पञ्चसरलवाक्यानां संस्कृतभाषायाम् अनुवादः		
'ग' खण्डः		l
अनुप्रयुक्तव्याकरणम्		(25 अङ्काः)
5. सन्धिकार्यम्	(2+2)	4
<ul> <li>व्यञ्जनसन्धिः - वर्गीयप्रथमवर्णस्य तृतीयवर्णे परिवर्तनम्, प्रथमवर्णस्</li> </ul>	य पञ्चमवर्णे परिवर्तनम्	
<ul> <li>विसर्गसन्धिः - विसर्गस्य उत्वम्, रत्वम्, विसर्गलोपः, विसर्गस्य स्थाने</li> </ul>	स्, श्, ष्	
6. समासः - वाक्येषु समस्तपदानां विग्रहः विग्रहपदानां च समासः	(1+1+1=1)	4
> तत्पुरुषः – विभक्तिः		
> बहुव्रीहिः		
> अव्ययीभावः (अनु, उप, सह, निर्, प्रति, यथा)		
<ul><li>द्वन्द्वः (केवलम् इतरेतरः)</li></ul>	(5)	4
7. प्रत्ययाः	(3+1)	4
<ul> <li>तिद्धताः – मतुप्, ठक्, त्व, तल्</li> <li>त्रिपास्त्राणे सम्प्रात्तीयः</li> </ul>		
🕨 स्त्रीप्रत्ययौ – टाप् , ङीप्		

8. वाच्यपरिवर्तनम् - केवलं लट्लकारे ( कर्तृ-कर्म-क्रिया)	3
9. समयः - अङ्कानां स्थाने शब्देषु समयलेखनम्	4
(सामान्य-सपाद-सार्ध-पादोन)	
10. अव्ययपदानि	3
उच्चैः, च, श्वः, ह्यः, अद्य, अत्र-तत्र, यत्र-कुत्र, इदानीम्, (अधुना, सम्प्रति, साम्प्रतम्)	
यदा, तदा, कदा, सहसा, वृथा, शनैः, अपि, कुतः, इतस्ततः, यदि-तर्हि, यावत्-तावत्	
11. अशुद्धि-संशोधनम् (वचन-लिङ्ग-पुरुष-लकार-विभक्तिदृष्ट्या संशोधनम्)	3
'घ' खण <del>्ड</del> :	
पठितावबोधनम्	(30 अङ्गाः)
12. गद्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम्	5
प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि	
भाषिककार्यम् –	
<ul><li>वाक्ये कर्तृ-क्रियापदचयनम्</li></ul>	
<ul><li>विशेषण-विशेष्यचयनम्</li></ul>	
<ul><li>पर्याय-विलोमपदचयनम्</li></ul>	
13. पद्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम्	5
प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि	
भाषिककार्यम् –	
<ul><li>वाक्ये कर्तृ-क्रियापदचयनम्</li></ul>	
<ul><li>विशेषण-विशेष्यचयनम्</li></ul>	
<ul><li>पर्याय-विलोमपदचयनम्</li></ul>	
14. नाट्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम्	5
प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि	
भाषिककार्यम् –	
<ul><li>वाक्ये कर्तृ-क्रियापदचयनम्</li></ul>	
<ul><li>विशेषण-विशेष्यचयनम्</li></ul>	
<ul><li>पर्याय-विलोमपदचयनम्</li></ul>	
15. वाक्येषु रेखाङ्कितपदानि अधिकृत्य चतुर्णां प्रश्नानां निर्माणम्	4
16. श्लोकान्वयः/ एकस्य श्लोकस्य संस्कृतेन भावार्थलेखनम्	4
17. घटनाक्रमानुसारं कथालेखनम्	4
18. प्रसङ्गानुकूलम् अर्थलेखनम्	3
(पाठान् आधृत्य लघूत्तरात्मकाः प्रश्नाः )	

आहत्याङ्काः - 80

### परीक्षायै निर्धारिताः पाठाः

पाठसङ्ख्या	पाठनाम
प्रथमः पाठः	शुचिपर्यावरणम्
द्वितीयः पाठः	बुद्धिर्बलवती सदा
चतुर्थः पाठः	शिशुलालनम्
पञ्चमः पाठः	जननी तुल्यवत्सला
षष्ठः पाठः	सुभाषितानि
सप्तमः पाठः	सौहार्दं प्रकृतेः शोभा
अष्टमः पाठः	विचित्रः साक्षी
नवमः पाठः	सूक्तयः
द्वादशः पाठः	अन्योक्तयः

## निर्धारित – पाठ्यपुस्तकानि –

- "शेमुषी' पाठ्यपुस्तकम् भाग-2", संशोधितसंस्करणम् (प्रकाशनम् – रा.शै.अनु.प्र.परि. द्वारा)
- "अभ्यासवान् भव-द्वितीयो भागः" व्याकरणपुस्तकम्
   (प्रकाशनम् रा.शै.अनु.प्र.परि. द्वारा)
- "व्याकरणवीथिः"- व्याकरणपुस्तकम्
   (प्रकाशनम् रा.शै.अनु.प्र.परि. द्वारा)

### अवधेयम् -

\* अनुप्रयुक्तव्याकरणस्य अंशानां चयनं यथासम्भवं 'शेमुषी-द्वितीयो भागः इति' पाठ्यपुस्तकात् करणीयम् । यदि ततः न सम्भवति तर्हि 'अभ्यासवान् भव- द्वितीयो भागः' इत्यस्मात् कर्तुं शक्यम् ।

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## नवमी/दशमी आन्तरिक-मूल्याङ्गनम् - 20 अङ्काः

## <u>उद्देश्यानि</u>

💠 छात्राणां सृजनात्मकक्षमतायाः विकासः।

श्रवण-भाषण-पठन-लेखनकौशलानां विकासः।

💠 चिन्तनक्षमतायाः आत्मविश्वासस्य च संवर्धनम्।

殐.	गतिविधयः	उदाहरणानि	अङ्गाः	निर्देशाः	मूल्याङ्कनबिन्दवः
सं.					
1.	आवधिक-परीक्षाः	लिखितपरीक्षा	05	विद्यालयेन समये समये	परीक्षासु यत्र विद्यार्थिनः
	(पीरियोडिक् -			लिखितपरीक्षाणाम्	श्रेष्ठाः अङ्काः स्युः तयोः
	असैस्मैंट)			आयोजनं करणीयं भवति।	द्वयोः परीक्षयोः एव
					अधिभारः ग्रहीतव्यः।
					अपि च आवधिकपरीक्षासु
					अपि प्रश्नेषु
					आन्तरिकविकल्पाः देयाः।
					मूल्याङ्कनसमये यदि छात्रः
					सर्वान् प्रश्नान् उत्तरित तर्हि
					छात्रहिताय यत्र अधिकाः
					अङ्काः सन्ति तेषाम् एव
					मूल्याङ्कनं करणीयम्।
2	बहुविधमूल्याङ्कनम्	<ul> <li>कक्षायां पाठितस्य</li> </ul>	05	कक्षायां पाठित-पाठस्य	<b>♦</b> मौलिकता
		पाठस्य		विषयस्य वा बहुविधं	<b>♦</b> विषयसम्बद्धता
		लघुमूल्याङ्कनम्		मूल्याङ्कनम् अपेक्षितम्	<b>♦</b> शुद्धता
		<ul><li>निर्गतपत्राणि</li></ul>		अस्ति । अनेन विद्यार्थिनां	<b>ः</b> समयबद्धता
		<ul><li>प्रश्नोत्तरी</li></ul>		विविधकौशलानां मूल्याङ्कनं	<b>ॐ</b> प्रस्तुतीकरणम्
		<ul><li>मौखिकी परीक्षा</li></ul>		भवेत्।	
		प्रतियोगिताः			
		<ul><li>प्रश्नमञ्चस्यायोजनम्</li></ul>			
3.	निवेशसूचिका	<ul><li>कक्षाकार्यम्</li></ul>	05	विद्यार्थिभिः कक्षायां कृतानां	<ul><li>सुलेखः</li></ul>
	(पोर्टफोलियो)	<ul><li>सामूहिक-मूल्याङ्कनम्</li></ul>		कार्याणाम् उपलब्धीनां च	तथ्यात्मकता
		स्वमूल्याङ्कनम्		संरक्षणं संयोजनं च	प्रामाणिकता
		<ul> <li>विद्यार्थिनः विषयगताः</li> </ul>		सञ्चिकायां पत्रावल्यां वा	<ul><li>समयबद्धता</li></ul>
		उपलब्धयः		करणीयम्। एतेन समग्रं	
				मूल्याङ्कनं प्रमाणिकत्वेन	
				भवितुं शक्नोति ।	

4.	भाषा-संवर्धनाय	<b>♦</b> कथा	05	❖ छात्राः कामपि कथां	<ul><li>उच्चारणम्</li></ul>
	गतिविधयः	<ul><li>❖ संवादः/ वार्तालापः</li></ul>	03	श्रावियतुं शक्नुवन्ति।	<ul><li>शुद्धता</li></ul>
	(क) श्रवण-	<ul><li>भाषणम्</li></ul>		ॐ शिक्षकः कमि विषयं	<ul><li>◆ समयबद्धता</li></ul>
	भाषण-कौशलम्	<ul><li>♣ नाटकम्</li></ul>		सूचियत्वा परस्परं संवादं	<ul><li>प्रस्तुतीकरणम्</li></ul>
	मापण-कारालम्	<ul><li>पाटकम्</li><li>वार्ताः</li></ul>		•	,
				कारयितुं शक्नोति ।	(आरोहावरोह-गतियति-
		<ul><li>आशुभाषणम्</li></ul>		❖ दूरदर्शने वार्तावली  ·	प्रयोगः)
		<ul><li>संस्कृतगीतानि</li></ul>		इत्याख्यः संस्कृत-	
		<ul><li>श्लोकोच्चारणम्</li></ul>		कार्यक्रमः प्रसारितः	
		<b>♦</b> प्रहेलिकाः		भवति तं द्रष्टुं छात्राः	
				प्रेरणीयाः ।	
				❖ श्रवण-कौशल-	
				मूल्याङ्कनाय शिक्षकः	
				स्वयम् अपि कथां	
				श्रावियत्वा ततः सम्बद्ध-	
				प्रश्नान् प्रष्टुं शक्नोति।	
	(ख)	<ul> <li>विविधविषयान् आधृत्य</li> </ul>		<ul><li>छात्राः यथाशक्यं</li></ul>	❖ विषय-सम्बद्धता
	लेखनकौशलम्	मौलिकलेखनम्		कक्षायामेव लेखनकार्यं	शुद्धता (विशेषतः
		यथा- देशः, माता,		कुर्युः।	पञ्चमवर्णस्यप्रयोगः)
		पिता, गुरुः, विद्या		❖ टिप्पणी- पुस्तिकायाः	<ul><li>समयबद्धता</li></ul>
		पर्यावरणम्, योगः,		निर्माणम् ।	<b>∻</b> सुलेखः
		समयस्य सदुपयोगः,		❖ वैयक्तिकपरीक्षणम्।	<ul><li>प्रस्तुतीकरणम्</li></ul>
		शिक्षा, अनुशासनम्		·	,
		इत्यादयः।			
		<ul><li>शैक्षिकभ्रमणस्य</li></ul>			
		संस्कृतेन			
		प्रतिवेदनलेखनम् ।			
		<ul><li>दैनन्दिनीलेखनम्।</li></ul>			
		<ul><li>सङ्केताधारितं</li></ul>			
		कथालेखनम्।			
		<ul><li>भित्तिपत्रिकायाः</li></ul>			
		निर्माणम्।			
		्रभागम्। <b>ॐ</b> श्रुतलेखः।			
		<ul><li>श्रुतलखः।</li><li>स्किलेखनम्।</li></ul>			
	313(1133111 311)	ζ, ,	<u>паэт.</u>	गुन्ति । गुनुननिका गुनुनुष्ट	भूजानिविधाः भूत
	, ,		प्रदत्ताः	सन्ति । एतदतिरिच्य एतादृशाः	जन्यगाताववयः आप
	। भवि	नुमर्हन्ति ।			

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#### **SCIENCE**

#### (Code No. 086)

Classes: IX and X (2024-25)

The subject of Science plays an important role in developing well-defined abilities in cognitive, affective and psychomotor domains in children. It augments the spirit of enquiry, creativity, objectivity and aesthetic sensibility.

Upper primary stage demands that a number of opportunities should be provided to the students to engage them with the processes of Science like observing, recording observations, drawing, tabulation, plotting graphs, etc., whereas the secondary stage also expects abstraction and quantitative reasoning to occupy a more central place in the teaching and learning of Science. Thus, the idea of atoms and molecules being the building blocks of matter makes its appearance, as does Newton's law of gravitation.

The present syllabus has been designed around seven broad themes viz. Food; Materials; The World of The Living; How Things Work; Moving Things, People and Ideas; Natural Phenomenon and Natural Resources. Special care has been taken to avoid temptation of adding too many concepts than can be comfortably learnt in the given time frame. No attempt has been made to be comprehensive.

At this stage, while Science is still a common subject, the disciplines of Physics, Chemistry and Biology begin to emerge. The students should be exposed to experiences based on hands on activities as well as modes of reasoning that are typical of the subject.

#### **General Instructions:**

- 1. There will be an Annual Examination based on the entire syllabus.
- 2. The Annual Examination will be of 80 marks and 20 marks weightage shall be for Internal Assessment.
- 3. For Internal Assessment:
  - a There will be Periodic Assessment that would include:
    - For 5 marks- Three periodic tests conducted by the school. Average of the best two tests to be taken that will have a weightage of 05 marks towards the final result.
    - For 5 marks- Diverse methods of assessment as per the need of the class dynamics and curriculum transaction. These may include - short tests, oral test, quiz, concept maps, projects, posters, presentations and enquiry based scientific investigations etc. and use rubrics for arguing them objectively. This will also have a weightage of 05 marks towards the final result.
  - b. Practical / Laboratory work should be done throughout the year and the student should maintain record of the same. Practical Assessment should be continuous. There will be weightage of 5 marks towards the final result. All practicals listed in the syllabus must be completed.
  - c Portfolio to be prepared by the student- This would include classwork and other sample of student work and will carry a weightage of 5 marks towards the final results.

## COURSE STRUCTURE CLASS IX

(Annual Examination)

Marks: 80

Unit No.	Unit	Marks
I	Matter - Its Nature and Behaviour	25
II	Organization in the Living World	22
III	Motion, Force and Work	27
IV	Food; Food Production	06
	Total	80
	Internal assessment	20
	Grand Total	100

**Theme: Materials** 

**Unit I: Matter-Nature and Behaviour** 

Definition of matter; solid, liquid and gas; characteristics - shape, volume, density; change of statemelting (absorption of heat), freezing, evaporation (cooling by evaporation), condensation, sublimation.

**Nature of matter:** Elements, compounds and mixtures. Heterogeneous and homogenous mixtures, colloids and suspensions. Physical and chemical changes (excluding separating the components of a mixture).

**Particle nature and their basic units:** Atoms and molecules, Law of Chemical Combination, Chemical formula of common compounds, Atomic and molecular masses.

**Structure of atoms:** Electrons, protons and neutrons, Valency, Atomic Number and Mass Number, Isotopes and Isobars.

Theme: The World of the Living

**Unit II: Organization in the Living World** 

**Cell - Basic Unit of life :** Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes - basic structure, number.

**Tissues, Organs, Organ System, Organism:** 

Structure and functions of animal and plant tissues (only four types of tissues in animals; Meristematic

and Permanent tissues in plants).

Theme: Moving Things, People and Ideas

**Unit III: Motion, Force and Work** 

Motion: Distance and displacement, velocity; uniform and non-uniform motion along a straight line;

acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated

motion, elementary idea of uniform circular motion.

Force and Newton's laws: Force and Motion, Newton's Laws of Motion, Action and Reaction forces,

Inertia of a body, Inertia and mass, Momentum, Force and Acceleration.

Gravitation: Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity),

Acceleration due to Gravity; Mass and Weight; Free fall.

Floatation: Thrust and Pressure. Archimedes' Principle; Buoyancy.

Work, Energy and Power: Work done by a Force, Energy, power; Kinetic and Potential energy; Law

of conservation of energy (excluding commercial unit of Energy).

Sound: Nature of sound and its propagation in various media, speed of sound, range of hearing in

humans; ultrasound; reflection of sound; echo.

Theme: Food

**Unit IV: Food Production** 

Plant and animal breeding and selection for quality improvement and management; Use of fertilizers

and manures; Protection from pests and diseases; Organic farming.

Note for the Teachers:

1. The chapter Natural Resources (NCERT Chapter 14) will not be assessed in the year-end

examination. However, learners may be assigned to read this chapter and encouraged to

prepare a brief write up on any concept of this chapter in their Portfolio. This may be for

Internal Assessment and credit may be given for Periodic Assessment/Portfolio.

2. The NCERT text books present information in boxes across the book. These help students

to get conceptual clarity. However, the information in these boxes would not be assessed

in the year-end examination.

#### **PRACTICALS**

Practicals should be conducted alongside the concepts taught in theory classes.

#### (LIST OF EXPERIMENTS)

- 1. Preparation of: Unit-I
  - a) a true solution of common salt, sugar and alum
  - b) a suspension of soil, chalk powder and fine sand in water
  - c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of
    - transparency
    - filtration criterion
    - stability
- 2. Preparation of Unit-I
  - a) A mixture
  - b) A compound

using iron filings and sulphur powder and distinguishing between these on the basis of:

- (i) appearance, i.e., homogeneity and heterogeneity
- (ii) behaviour towards a magnet
- (iii) behaviour towards carbon disulphide as a solvent
- (iv) effect of heat
- 3. Perform the following reactions and classify them as physical or chemical changes: Unit-I
  - a) Iron with copper sulphate solution in water
  - b) Burning of magnesium ribbon in air
  - c) Zinc with dilute sulphuric acid
  - d) Heating of copper sulphate crystals
  - e) Sodium sulphate with barium chloride in the form of their solutions in water
- 4. Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams.
  Unit-II
- Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smoothand cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

  Unit-II
- **6.** Determination of the melting point of ice and the boiling point of water.

**Unit-I** 

7. Verification of the Laws of reflection of sound.

**Unit-III** 

- Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.

  Unit-III
- 9. Establishing the relation between the loss in weight of a solid when fully immersed in Unit-III
  - a) Tap water
  - b) Strongly salty water with the weight of water displaced by it by taking at least two differentsolids.
- Determination of the speed of a pulse propagated through a stretched string/slinky (helical spring).

  Unit-III
- **11.** Verification of the law of conservation of mass in a chemical reaction.

Unit-III

# COURSE STRUCTURE CLASS X

(Annual Examination)

Marks: 80

Unit No.	Unit	Marks
I	Chemical Substances-Nature and Behaviour	25
II	World of Living	25
Ш	Natural Phenomena	12
IV	Effects of Current	13
V	Natural Resources	05
	Total	80
	Internal assessment	20
	Grand Total	100

**Theme: Materials** 

**Unit I: Chemical Substances - Nature and Behaviour** 

**Chemical reactions:** Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic exothermic reactions, oxidation and reduction.

**Acids, bases and salts:** Their definitions in terms of furnishing of H+ and OH- ions, General properties, examples and uses, neutralization, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleachingpowder, Baking soda, Washing soda and Plaster of Paris.

**Metals and nonmetals:** Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Basic metallurgical processes; Corrosion and its prevention.

Carbon compounds: Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydro carbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.

Theme: The World of the Living

**Unit II: World of Living** 

**Life processes:** 'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.

**Control and co-ordination in animals and plants:** Tropic movements in plants; Introduction of plant hormones; Control and co-ordination in animals: Nervous system; Voluntary, involuntary and reflex action: Chemical co-ordination: animal hormones.

**Reproduction:** Reproduction in animals and plants (asexual and sexual) reproductive health - need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women's health.

**Heredity and Evolution:** Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination: brief introduction: (topics excluded - evolution; evolution and classification and evolution should not be equated with progress).

Theme: Natural Phenomena
Unit III: Natural Phenomena

Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required),magnification. Refraction; Laws of refraction, refractive index.

Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens.

Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses.

Refraction of light through a prism, dispersion of light, scattering of light, applications in dailylife

(excluding colour of the sun at sunrise and sunset).

**Theme: How Things Work** 

**Unit IV: Effects of Current** 

Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors

on which the resistance of a conductor depends. Series combination of resistors, parallel

combination of resistors and its applications in daily life. Heating effect of electric current and its

applications in daily life. Electric power, Interrelation between P, V, I and R.

Magnetic effects of current: Magnetic field, field lines, field due to a current carrying conductor,

field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left

Hand Rule, Direct current. Alternating current: frequency of AC. Advantage of AC over DC.

Domestic electric circuits.

**Theme: Natural Resources** 

**Unit V: Natural Resources** 

Our environment: Eco-system, Environmental problems, Ozone depletion, waste production and

their solutions. Biodegradable and non-biodegradable substances.

Note for the Teachers:

1. The chapter Management of Natural Resources (NCERT Chapter 16) will not be assessed

in the year-end examination. However, learners may be assigned to read this chapter and

encouraged to prepare a brief write up to any concept of this chapter in their Portfolio. This

may be for Internal Assessment and credit may be given Periodic Assessment/Portfolio).

2. The NCERT text books present information in boxes across the book. These help students

to get conceptual clarity. However, the information in these boxes would not be assessed

in the year-end examination.

**PRACTICALS** 

Practical should be conducted alongside the concepts taught in theory classes.

LIST OF EXPERIMENTS

1. A. Finding the pH of the following samples by using pH paper/universal indicator: Unit-I

- Dilute Hydrochloric Acid
- (ii) Dilute NaOH solution
- (iii) Dilute Ethanoic Acid solution
- (iv) Lemon juice
- Water (v)
- Dilute Hydrogen Carbonate solution

	B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:  Unit-I
	<ul><li>a) Litmus solution (Blue/Red)</li><li>b) Zinc metal</li></ul>
2	,
2.	Performing and observing the following reactions and classifying them into:  Unit-I  A. Combination reaction
	'
	D. Double displacement reaction
	(i) Action of water on quicklime
	(ii) Action of heat on ferrous sulphate crystals
	(iii) Iron nails kept in copper sulphate solution
	(iv) Reaction between sodium sulphate and barium chloride solutions
3.	Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions: Unit-
	i) ZnSO <sub>4</sub> (aq)
	ii) FeSO <sub>4</sub> (aq)
	iii) CuSO <sub>4</sub> (aq)
	iv) Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> (aq)
	Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.
4.	Studying the dependence of potential difference (V) across a resistor on the current (I) passing
	through it and determine its resistance. Also plotting a graph between V and I. Unit-IV
5.	Determination of the equivalent resistance of two resistors when connected in series and
	parallel. Unit-IV
6.	Preparing a temporary mount of a leaf peel to show stomata.  Unit- II
7.	Experimentally show that carbon dioxide is given out during respiration. Unit-II
8.	Study of the following properties of acetic acid (ethanoic acid):  i) Odour  Unit- I
	ii) solubility in water
	iii) effect on litmus
	iv) reaction with Sodium Hydrogen Carbonate
9. 10.	Study of the comparative cleaning capacity of a sample of soap in soft and hard water. Unit-I  Determination of the focal length of:  Unit-III

4.

5.

7.

8.

- i) Concave mirror
- ii) Convex lens by obtaining the image of a distant object.
- 11. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
  Unit III
- **12.** Studying (a) binary fission in *Amoeba*, and (b) budding in yeast and Hydra with the help of prepared slides. **Unit-II**
- **13.** Tracing the path of the rays of light through a glass prism.

Unit-III

14. Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).

**Unit-II** 

### PRESCRIBED BOOKS:

- Science-Textbook for class IX-NCERT Publication
- Science-Text book for class X- NCERT Publication
- Assessment of Practical Skills in Science-Class IX CBSE Publication
- Assessment of Practical Skills in Science- Class X- CBSE Publication
- Laboratory Manual-Science-Class IX, NCERT Publication
- Laboratory Manual-Science-Class X, NCERT Publication
- Exemplar Problems Class IX NCERT Publication
- Exemplar Problems Class X NCERT Publication

## **Question Paper Design**

(Class X)

# Subject: Science

Competencies	Total
Demonstrate Knowledge and Understanding	46 %
Application of Knowledge/Concepts	22 %
Formulate, Analyze, Evaluate and Create	32 %
	100%

### Note:

- Typology of Questions: VSA including objective type questions, Assertion Reasoning type questions; SA; LA; Source-based/ Case-based/ Passage-based/ Integrated assessment questions.
- An internal choice of approximately 33% would be provided.

### **Internal Assessment** (20 Marks)

- Periodic Assessment 05 marks + 05 marks
- Subject Enrichment (Practical Work) 05 marks
- **Portfolio** 05 marks

# Suggestive verbs for various competencies

- Demonstrate Knowledge and Understanding
- State, name, list, identify, define, suggest, describe, outline, summarize, etc.
- Application of Knowledge/Concepts
- o Calculate, illustrate, show, adapt, explain, distinguish, etc.
- Formulate, Analyze, Evaluate and Create
- o Interpret, analyze, compare, contrast, examine, evaluate, discuss, construct, etc.







# CBSE SOCIAL SCIENCE SYLLABUS 2024-25 (Code No. 087) CLASS - IX & X

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### **RATIONALE**

The purpose of the education system is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper, and creative imagination, with sound ethical moorings and values. It aims at producing engaged, productive, and contributing citizens for building an equitable, inclusive, and plural society as envisaged by our Constitution. [NEP 2020, pages 4-5]

Social Science is a compulsory subject up to secondary stage of school education. It is an integral component of general education. Social Science can play a unique role within the school curriculum to enable the Knowledge, Capacities, and Values and Dispositions that underpin this purpose of education as committed to in NEP.

Social Science plays an important role in developing an integrated understanding of the human world and its functioning, including its deep interrelationships with nature and the environment in the quest to continuously improve as a society. In the study of this subject, students learn methods of observing and interpreting the human world, which helps them lead their own lives and also contribute as members of a society.

Social Science also helps in developing some of the Values and Dispositions that are essential for democratic participation — building and sustaining cooperation among communities that strive for peace, harmony, equity, and justice for all. It encourages them to understand and appreciate the feeling of Indianness 'Bhartiyata' by valuing the rich cultural heritage and tradition of the country.

Social Science plays an important role in developing in an individual student a comprehensive sense of the human world and its functioning. In an increasingly globalizing and interdependent world, this understanding is critical to help students see how things around them are changing, what are the causes of these changes, and how the change impacts human societies.

It also helps them realize the need for interdependence, collaboration, and an appreciation for the diversity of human culture and societies. The subject also teaches students the method of observing and interpreting the world wearing the hat of a social scientist. It does so by building core skills such as observing what is going on around them, analysing causes of various phenomena (historical, geographical, socio-political, or economic) using evidence, asking questions, making connections, forming viewpoints based on conceptual understanding and evidence, recognizing patterns and generalizations, and arriving at logical conclusions.

These skills prepare the students in contributing to the nation as a responsible citizen of society.

### **AIMS & OBJECTIVE**

The aims of Social Science in school education can be summarised as follows: as per NCF-2023

a. Develop the disciplinary knowledge and understanding of how society functions through an interplay of historical, geographical, social, economic, and political factors.

This can be enabled through:

- i. an understanding of continuity and change in human civilisation, its causation and effect, and its impact on modern life,
- ii. an understanding of the interaction between nature and human beings, the spatial patterns arising out of this interaction, and its effect on human life.
- iii. awareness and understanding of the diversity of people and their practices in different societies, regions, and cultures within societies, iv.an awareness of various social, political, and economic institutions, their origin, functioning and transformations over time.
- b. Develop an understanding and appreciation for the methods of enquiry relevant to Social Science and deepen students' skills to engage with the key questions and issues confronting society.

# These could be specifically seen as:

- i. Skills in sourcing evidence, interpreting them, confirming through multiple sources and evidence, and constructing a coherent narrative,
- ii. Skills in recognizing spatial patterns, map-reading, interpretation and analysis of various interconnected concepts and processes,
- iii. Skills of creative and analytical thinking to form informed opinions, demonstrate logical decision-making, and incline towards a problem-solving attitude,
- iv. Skills to collect, organize, analyse, represent, and present data and information on various historical, geographical, and socio-political issues,
- v. Skills to question unsubstantiated ideas, biases, stereotypes, and assumptions to foster scientific temper and propose meaningful responses to contemporary concerns of society.

# c. Foster ethical, human, and Constitutional values:

As the DNEP 2019 emphasises, to foster a "democratic outlook and commitment to liberty and freedom; equality, justice, and fairness; embracing diversity, plurality, and inclusion; humaneness and fraternal spirit; social responsibility and the spirit of service; ethics of integrity and honesty; scientific temper and commitment to rational and public dialogue; peace; social action through Constitutional means; unity and integrity of the nation, and a true rootedness and pride in India with a forward-looking spirit to continuously improve as a nation.

# CLASS IX COURSE STRUCTURE

History (I	ndia and the (	Contemporary World - I)	Suggestive no. of periods = 60	20 inclusive of Map pointing
Section	Chapter No	Chapter Name	No. of Periods	Marks allocated
]	I	The French Revolution	15	
Events and Process	II	Socialism in Europe and the Russian Revolution	15	18+2 map pointing
	III	Nazism and the Rise of Hitler	15	
II	IV	Forest, Society and Colonialism		
Livelihoods, Economies		Interdisciplinary project as part of multiple assessments	5	
and Societies		(Internally assessed for 5 marks)		
	V	Pastoralists in the Modern World	10	
		(To be assessed as part of Periodic Assessment only)		
Geo	ography (Conto	emporary India - I)	Suggestive no. of periods = 55	20 inclusive of Map pointing
Chapter No		Chapter Name	No. of periods	Marks allocated
1	India – Size a	nd Location	17	
2	Physical Feat	ures of India		
3	Drainage	10		

Climat	Э	12	47.0		
		3	17+3 map pointing*		
		5			
Popula	tion	8	* Marks as mentioned above		
P	olitical Science (Democratic Politics - I)	Suggestive no. of periods = 50	20 Marks		
	Chapter name	No. of Periods	Marks allocated		
What i	s Democracy?	40			
Why D	emocracy?	10			
Consti	utional Design	10			
Electo	ral Politics	8	20		
Workin	g of Institutions	12			
Demo	cratic Rights	10			
	Economics	Suggestive no. of periods = 50	20 Marks		
lo.	Name of the Chapter	No. of Periods	Marks allocated		
	The Story of Village Palampur (To be assessed as part of Periodic Assessment only)	10			
	Natura (Only I Interdi (Internation of the content	What is Democracy?  Why Democracy?  Constitutional Design  Electoral Politics  Working of Institutions  Democratic Rights  Economics  Name of the Chapter  The Story of Village Palampur	Natural Vegetation and Wildlife (Only map pointing to be evaluated in the annual examination.)       3         Interdisciplinary project as part of multiple assessments (Internally assessed for 5 marks)       5         Population       8         Political Science (Democratic Politics - I)         Chapter name       No. of Periods         What is Democracy?       10         Why Democracy?       10         Constitutional Design       10         Electoral Politics       8         Working of Institutions       12         Democratic Rights       10         Economics         Io.       Name of the Chapter         The Story of Village Palampur       10		

2	People as Resource	10	
3	Poverty as a Challenge	15	20
4	Food Security in India	15	

# CLASS IX COURSE CONTENT

	HISTORY: India and the Contemporary World - I									
Content	Curricular goals	Competency		Learning outcome		Suggestive Pedagogical				
						process				
Section I: Events and Processes  Chapter-1 The French Revolution	CG-2 Analyses the important phases in world history and draws insight to understand the present-day world	c-2.1 Explains historical events and processes with different types of sources with specific examples from India and world history.  c-2.4 Explains the growth of new ideas and practices across the world and how they affected the course of world history.  c-2.5 Recognises the various practices that arose, such as those in c-2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of which have also impacted the course of world history and	AAA	The students will be able to Infer how the French Revolution had an impact on the European countries in the making of nation states in Europe and elsewhere. Will be able to Illustrate that, the quest for imperialism triggered the First World War. Will Examine various sources to address imbalances that may lead to revolutions.	A A A	address such imbalances and discriminations that lead to revolutions.				

		have left unhealed wounds.				
Chapter 2- Socialism in Europe and the Russian Revolution	CG-2 Analyses important phases of world history and draws insight to understand the present-day world	C-2.1 Explains historical events and processes with different types of sources with specific examples from India and world history.  C-2.4 Explains the growth of new ideas in Europe and Asia and how it affected the course of human history	A A	situations that led to the establishment of Lenin's communism and Stalin's collectivization.	A A A	making of concept maps/role plays etc reflecting the situations which led to both revolutions. Flow chart reflecting how Lenin's communism /Stalin's collectivization wa established.
Chapter 3-Nazism and the Rise of Hitler.	CG-2 Analyses important phases of world history and draws insight to understand the present-day world	C-2.1 Explains historical events and processes with different types of sources with specific examples from India and world history. C-2.4 Explains the growth of new ideas in Europe and Asia and how it affected the course of human history.	A A A	Analyse the role of "Treaty of Versailles" in the rise of Hitler to power. Analyse the genocidal war waged against the "undesirables" by Hitler. Compare and contrast the characteristics of Hitler and Gandhi	A	Audio-visual aids like a film or animations can be shown followed by a discussion on the reasons for the rise and fall of Hitler.  Jig saw strategy to critique the genocidal war waged against the "undesirable" by the Nazis.

		C-2.5 Recognises the various practices that arose, such as those in C-2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of which have also impacted the course of world history and have left unhealed wounds.			A	the Characters-Hitler and Gandhi. Cartoon interpretations on these leaders.
Section II: Livelihoods, Economies and	Inter Disciplinary Project with Chapter 5	Refer Annexure II		Refer Annexure II		Refer Annexure II
Societies	of Geography "Natural					
Chapter 4 Forest Society and	Vegetation and Wildlife"					
Colonialism	VVIIGIIIE					
Chapter 5	CG-4 Develops an	C-4.3 Draws inter-	>	Examine the situations	>	Locate the various
Pastoralists in the	understanding of the	linkages between		that have created		pastoral communities
Modern World	inter-relationship between human beings	various components of the physical		nomadic societies highlighting the key		on an outline map of India and explain
	and their physical	environment, such as		factor played by the		cyclical movements of
	environment and how	climate and relief,		climatic conditions and		these according to
	that influences the	climate and vegetation,		topography.		climatic conditions.
	livelihoods, cultural	vegetation, and wildlife.	>	Analyse varying	>	Audio Visual aids like
	diversity, and	C-4.4 Analyses and		patterns of		documentaries on the
	biodiversity of the	evaluates the inter-		developments within		various pastoral
	region	relationship between		pastoral societies in		

		the natural environment and human beings and their cultures across regions and, in the case of India, the special environmental ethos that resulted in practices of nature conservation.  C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them	India. > Comp impac	ent places in brehend the et of colonialism storalists in India frica.	AAA	communities can be shown.  Presentations comparing the lives of pastoralists and the colonial impact on pastoralists in India and Africa.  T charts and similar graphic organizers to compare the lives of pastoralists in pre- and post-colonial periods.  Think-pair and share can be practised to discuss various methods of colonial policies of exploitation and their impact on pastoralists of Africa and India.
	Polit	ical Science: Democratic	Politics -	-1		
Content	Curricular goals	Competency	Learr	ning outcome	S	uggestive Pedagogical process
	CG-5 Understands the	C-5.4 Analyses the	Exam	nine the concept	~	Brainstorming on

basic features of a

democratic government

and its history in India

democracy and

structural

components of

forms/ features.

Democracy and its

Indian Constitution and

explores the essence

of Indian democracy

and the characteristics

1. What is Democracy?

Why Democracy?

of Democracy

introduction of concepts

of Democracy & features

	of a democratic government	and across the world – and compares this form of government with other forms of government	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Contrast working of democracies of India and North Korea and infer on their differences and significance in each country.  Analyse and infer on the different historical processes and forces that have contributed for the promotion of democracy	AAA	4 corners strategy to discuss "What & why of democracy? students create democratic governance model in the class. Cartoon interpretation to summarize the benefits of democracy
2. Constitutional Design	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.1 Understands that the Indian Constitution draws from the great cultural heritage and common aspirations of the Indian nation, and recalls India's early experiments with democracy (assemblies in Mahajanapadas, kingdoms and empires at several levels of the society, guilds sanghas and ganas, village councils and committees, Uthiramerur inscriptions)	A A A	Group discussion and describe the situation that led to creation of Indian Constitution Enumerate the essential features that need to be kept in mind while drafting any constitution.  Examine the guiding values that created the Indian constitution		Group Discussion to comprehend the purpose of constitution. Poster making/ wall magazine for Comparing and contrasting between Preamble of South African constitution with the preamble of Indian constitution. Declamation strategy for discussing the roles and responsibilities of citizens.

3. Electoral Politics	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.3 Explains that fundamental rights are the most basic human rights, and they flourish when people also perform their fundamental duties	A A	essential features of the Indian Electoral system. Examine the rationale for adopting the present Indian Electoral System.	A A A A	election manifesto. Create multiple parties and create symbols for elections. Use street play to create awareness about the right to vote and fundamental duties.
4. Working of Institutions	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.5 Analyses the critical role of non-state and non-market participants in the functioning of a democratic government and society, such as the media, civil society, socio-religious institutions, and community institutions	A	Examine the roles, responsibilities, and interdependency of all the 3 organs of the Government.  Appreciate the parliamentary system of executive's accountability to the legislature.  Summarize and evaluate the rule of law in India.	A A	Watch videos of Parliament and discuss the importance of question hour. Present Moot court to evaluate the rule of Law. Examine the relevant case studies to evaluate the rule of law conduct Mock Parliament session. Collect information on the performance of the functioning of a democratic government and society from social media and other institutions and present.

5. Democratic Rights	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.2 Appreciates fundamental Constitutional values and identifies their significance for the prosperity of the Indian nation.	AAAA	Analyse the role of the responsible citizens.  Summarize the importance of fundamental rights and duties in the light of the nation's glory.  Recognize the role of a responsible citizen while performing their prescribed duties versus claiming rights.	A A A A	Debate the need to have rights in the light of study of Saudi Arabia. Case study to analyse the role of citizens when the rights are exercised or otherwise. Organize a moot court to discuss the violation of individual rights. Graphic organizer to summarize the coexistence of rights vs duties.
	G	eography: Contemporar	y Ind	dia - I		
Content	Curricular goals	Competency		Learning outcome		Suggestive Pedagogical process
1. India – Size and Location	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.	C-4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map.		Examine how the location of an area impacts its climate and time with reference to longitude and latitude. Explore and analyses the trading and cultural relationships of India with its neighbouring countries. Evaluate the situation & reasons that made	A	On map of India Locate physiographic regions of India and the climatic zones of the world on a globe/map. Use GeoGebra, Google earth to represent and justify the reasons for the differences in climatic conditions, local and standard time. Brainstorming strategy for inferring conditions

			1			
			A	82.5E* longitude as Time meridian of India. Examine how location of India enables its position as a strategic partner in the subcontinent. Justify the reasons for the differences in climatic conditions, local and standard time.	A	and relationships of the people living in states that are sharing border with the neighbouring countries impact trade and culture.  Make a PPT presentation on the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.
2. Physical Features of India	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.	C-4.2 Explains important geographical concepts, characteristics of key landforms, their origin, and other physical factors of a region	A A	Justify how the Physical Features of India influences the livelihoods, culture, and the biodiversity of the region.  Examine the geological process that played a crucial role in the formation of diverse physical features in India.  Analyse the conditions and relationships of the people living in different physiographic areas.	AAA	Use Art integrated strategies like gallery walk/Model making to demonstrate how physical features make India a sub-continent. Group work to discuss the lives and relationships amongst physiographic areas. Brainstorming and make a comparison of India's Physical features with another country. presentation using different modes such as

			>	Examine various environmental issues.		Journals, Collage and other references.
3.Drainage	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them	A A	Examine the information about different lakes and infer on their contribution to Indian ecology. Present creative solutions to overcome the water pollution also to increase the contribution of water bodies to Indian economy. Identify the river systems of the country and explain the role of rivers in human society	A A A	Choice Board strategy where each group to take up one river and focus on the areas they serve and the impact on Economy of that area. Students will prepare a chart on lakes. Slogan writing, poster making/ save River songs/ to bring awareness on water pollution and suggest solutions
4. Climate	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.3 Draws interlinkages between various components of the physical environment, such as climate and relief, climate and vegetation and wildlife	A A	Analyse and infer the effect of monsoon winds on rainfall of the Indian subcontinent. Analyse the temperatures between plateau region, Himalayan region, desert region and coastal region. Enumerate and summarize the reasons for the wide difference between temperatures at different	A $A$	Use Mind map/ graphic organizers to enumerate and summarize the reasons for the wide difference between the day and night temperatures at different geographical locations of India.  Collect Newspaper reports for knowing the weather status.  Prepare and present mock drills on climate change and protocols as

			geographical locations of India	preventive action for various disasters
5. Natural Vegetation and Wildlife.	Inter disciplinary project	Inter disciplinary project with chapter no IV of History "Forest, Society and Colonialism	Refer annexure II	Refer annexure II
6. Population	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation	<ul> <li>Analyse and infer the reasons behind the uneven distribution of population in India with specific reference</li> <li>to UP &amp; Rajasthan and Mizoram and Karnataka</li> <li>Enlist the factors that affect the population density</li> </ul>	<ul> <li>Use a Pie -diagram to depict the population distribution in India.</li> <li>Group discussion and presentation on reasons behind the uneven distribution of Population</li> </ul>
		ECONOMICS		Occurred the Dadamarian
Content	Curricular goals	Competency	Learning outcome	Suggestive Pedagogical process
Chapter 1: The Story of Village Palampur	CG-7 Develops an understanding of the economy of a nationstate, with specific reference to India.	C-7.1 Defines key features of the economy such as production, distribution, demand, supply, trade, and commerce, and factors that influence these aspects (including technology).	<ul> <li>Enlist the requirements of production and comprehend the interdependence of these requirements.</li> <li>Corelate farming and non-farming activities to economic growth.</li> <li>Comprehend how the significance of conditions of farming</li> </ul>	<ul> <li>Visit to a nearby village or local markets and interview different classes of farmers to know about their lifestyles and thereafter present in the class.</li> <li>Concept map/Poster making/ gallery walk to enlist the factors of production and</li> </ul>

		C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India.	>	and the factors of production impact economic development. Find solutions to foster an equitable society.	A	evaluate their interdependence. Discussion/PPT presentation on how to eradicate poverty among farmers and trying to suggest innovative strategies to improve the farmers lifestyles.
Chapter -2 People as Resource	CG-7 Develops an understanding of the economy of a nation, with specific reference to India.	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India.	A A	Evaluate the reasons that contribute to the quality of population. Observe the different government schemes in some states and see its effect on the quality of people there by. Propose innovative strategies to resolve unemployment problems.	A	Classroom discussions/debates on various factors that affect the quality of population. For e.g. significance of Education/Health in Human Resource Development. Make a newsletter collecting articles from newspapers/magazines etc on illiteracy and unemployment status in India and government initiative in solving the issues. Audio-Visual aids showing initiatives undertaken by the government in promoting education

Chapter 3 Poverty as a challenge	CG-8 Evaluates the economic development of a country in terms of its impact on the lives of its people and nature.	C-8.1 Gathers, comprehends, and analyses data related to poverty and unemployment in one's locality and at the national level. C-8.2 Understands and analyses the concepts and practice of the range of economic systems – from free market to entirely state controlled markets. C-8.4 Describes India's recent path towards again becoming one of the three largest	<ul> <li>Comprehend the reasons of poverty in the rural and urban areas.</li> <li>Evaluate the efficacy of government to eradicate poverty.</li> <li>Compare how poverty estimates have transformed from 1993-94 to 2011-12.</li> <li>Corelate the link between education and poverty.</li> </ul>	and employment in various states of India.  PPT presentation using case study given in NCERT text on the reasons of rural and urban poverty.  Declamation with data to evaluate the efficacy of government to eradicate poverty and suggest measures/ ways which can be used to minimise the same.  Debate on the topic-'Can education remove poverty?'
		again becoming one of		poverty?
		world, and how individuals can contribute to this		
		economic progress		

Chapter 4 Food	CG-8 Evaluates the	C-8.2 Understands and	>	Comprehend various	>	Case study and group
Security in India	economic development of a country in terms of its impact on the lives of its people and nature.		<b>A</b>	aspects of food security that will ensure continuity of supply to the masses. Enumerate the different features of PDS that directly address FSI. Analyse and infer the impact of Green Revolution. Analyse the causes and impact of famines/disasters in food security during pre and post independent India.	<b>A</b>	discussion to connect the link between a well- structured food security system and continuity of supply to masses. Guest Speaker programmes where govt. officials can be called to talk on FSI and PDS (Public Distribution System) Panel Discussion /seminar on the impact of the green revolution and PDS. Concept maps explaining the causes behind the famines in the colonial period and the causes and impact of recurring disasters on food security in post independent India through examples.

# CLASS IX LIST OF MAPS

S. No.	Subject	Name of the Chapter	List of Areas to be located /labeled/identified on the map			
I	History	French Revolution	Outline political map of France. Locate/label/identify.  Bordeaux, Nantes, Paris and Marseille			
		Socialism in Europe and the Russian Revolution	Outline political map of the World. Locate/label/identify Major countries of First World War: Central Powers: Germany, Austria-Hungary, Turke (Ottoman Empire).  Allied Powers – France, England, Russia and USA			
		Nazism and the Rise of Hitler	Outline Political Map of World. Locate/label/identify Major countries of Second World War Axis: Powers – Germany, Italy, Japan Allied Powers – UK, France, Former USSR, USA			
II	Geography	India : size and location	<ul> <li>India – States and Capitals</li> <li>Tropic of Cancer, Standard Meridian (Location and Labeling)</li> <li>Neighbouring Countries</li> </ul>			
		India physical features	<ul> <li>Mountain Ranges: The Karakoram, The Zanskar, The Shivalik, The Aravali, The Vindhya, The Satpura, Western and Eastern Ghats</li> <li>Mountain Peaks – K2, Kanchan Junga, Anai Mudi</li> <li>Plateau – Deccan Plateau, Chota Nagpur Plateau, Malwa Plateau</li> <li>Coastal Plains – Konkan, Malabar, Coromandel &amp; Northen Circar (Location and Labelling)</li> </ul>			
		Drainage system	<ul> <li>Rivers (Identification only)</li> <li>The Himalayan River Systems – The Indus, The Ganges and The Sutlej</li> <li>The Peninsular Rivers – The Narmada, The Tapti, The Kaveri, The Krishna, The Godavari, The Mahanadi</li> <li>Lakes – Wular, Pulicat, Sambar, Chilika</li> </ul>			
		Climate	Annual rainfall in India, Monsoon wind direction			
		Population	Population density of all states			
			The state having highest and lowest density of population			

CLASS IX
INTERNAL ASSESSMENT: 20 MARKS

Type of Assessment	Description	Marks Allocated
Periodic Assessment	Pen Paper Test	5
Multiple Assessment	Quiz, debate, role play, viva, group discussion, visual expression, interactive bulletin boards, gallery walks, exit cards, concept maps, peer assessment, self-assessment etc. through inter disciplinary project	5
Subject Enrichment Activity	Project work on Disaster Management	5
Portfolio	Classroom, work done (activities/assignments) reflections, narrations, journals etc. Achievements of the student in the subject throughout the year Participation of the student in different activities like Heritage India quiz etc.	5

# CLASS IX PRSECRIBED TEXT BOOKS

S. No.	Subject	Name of the Book	Publisher
1	History	India and the Contemporary World-I	NCERT
2	Political Science	Democratic Politics-I	NCERT
3	Geography	Contemporary India-I	NCERT
4	Economics	Economics	NCERT
5	Disaster Management	Together, towards a safer India- Part II	CBSE

Note: Please procure latest reprinted edition (2024-25) of prescribed NCERT textbooks.

CLASS COURSE STRUCTURE

ŀ	History (India a	and the Contemporary World-II)	Suggestive no. of periods = 60	20 inclusive map pointing
Section	Chapter No.	Chapter name	No. of periods	Marks allocated
l	I	The Rise of Nationalism in Europe	17	
Events and processes	II	Nationalism in India	17	18+2 map pointing
II Livelihoods, Economies and Societies	III	The making of a Global World ( <b>To be evaluated in the Board Examination</b> Subtopics: 1 to 1.3 Pre Modern World to Conquest, Disease and trade)	6	
		Interdisciplinary project as part of multiple assessments (internally assessed for 5 marks) Subtopics 2 to 4.4 -The nineteenth century (1815-1914) to end of Bretton Woods & the beginning of "Globalization"	4	
	IV	The Age of Industrialization (To be assessed as part of Periodic Assessment only)	6	
III Everyday Life, Culture and politics	V	Print Culture and the Modern world	10	
	Geograp	hy (Contemporary India-II)	Suggestive no. of periods = 55	20 inclusive map pointing
Chapter No.		Chapter name	No. of periods	Marks allocated
1	Resources and Development		7	
2	Forest and W	ildlife Resources	7	

3	Water res	sources	7	17+3 map pointing
4	Agricultur	е	10	
5	Minerals	and energy Resources	10	
6	Manufact	uring Industries	10	
7		of National Economy pointing to be evaluated in the Board Examination	2	
		olinary project as part of multiple assessments v assessed for 5 marks)	2	
	Political Science (Democratic Politics-II)		Suggestive no. of periods = 50	20
Unit No.	Chapter No.	Chapter name	No. of periods	Marks allocated
I	1	Power-sharing	15	
	2	Federalism		20
II	3	Gender, Religion and Caste	12	
III	4	Political Parties	12	
IV	5	5 Outcomes of Democracy		
	Economics (Understanding Economic Development)		Suggestive no. of periods = 50	20
Chapter	No.	Chapter name	No. of periods	Marks allocated

1	Development	12	
2	Sectors of the Indian Economy	12	20
3	Money and Credit	12	
4	Globalization and the Indian Economy	8	
	To be evaluated in the Board Examination		
	<ul><li>What is Globalization?</li><li>Factors that have enabled Globalization</li></ul>		
	Interdisciplinary project as part of multiple assessment	6	
	(Internally assessed for 5 marks)		
	<ul> <li>Production across the countries</li> </ul>		
	Chinese toys in India		
	World Trade Organization		
	The Struggle for a Fair Globalization		
5	Consumer Rights (Project Work)		

# CLASS X COURSE CONTENT

	HISTORY: India and the Contemporary World - II								
Content	Curricular goals	Competency	Learning outcome	Suggestive Pedagogical process					
I The Rise of Nationalism in Europe	CG-2 Analyses important phases in world history and draws insight to understand the present - day world.  CG-3 Understands the idea of a nation and the emergence of the modern Indian Nation	C-2.4 Explains the growth of new ideas in Europe and Asia (humanism, mercantilism, industrialisation, colonialism, scientific developments and explorations, imperialism, and the rise of new nation-states across the world) and how it affected the course of human history. C-2.5 Recognises the various practices that arose, such as those in C-2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of	<ul> <li>Infer how the French Revolution had an impact on the European countries in the making of nation state.</li> <li>Comprehend the nature of the diverse social movements of the time.</li> <li>Analyse and infer the evolution of the idea of nationalism which led to the formation of nation states in Europe and elsewhere.</li> <li>Evaluate the reasons which led to the First World War.</li> </ul>	<ul> <li>Presentation and discussion on the French Revolution after watching animations/films/reading stories or novels related to French revolution.</li> <li>Use of graphic organizers to explain unification of states to form one nation.</li> <li>Map activity familiarising the location of various places studying the map of Europe after the Congress of Vienna 1815 and locating important places on the political outline map of Europe.</li> <li>World Café on changes after 1815 in Europe.</li> <li>Role play on the social revolutions of Europe</li> </ul>					

II Nationalism in India	CG-3 Understands the idea of a nation and the emergence of the modern Indian Nation.	which have also impacted the course of world history and have left unhealed wounds.  C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and	<b>A</b>	Illustrate various facets of Nationalistic movements that ushered in the sense of Collective Belonging. Evaluate the effectiveness of the strategies applied by	\ \ \	Sequence chart/ story Board/ Story telling pedagogy to Illustrate various facets of Nationalistic movements that ushered in the sense of Collective Belonging Students will examine textual content and other
		other important figures as well as those that led to independence, and understands the specific Indian concepts, values, and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma self-sacrifice, ahimsa) that played a part in achieving Independence.	<b>&gt;</b>	Gandhiji and other leaders in the movements organised by him. Summarise the effects of the First World War that triggered the two defining movements (Khilafat &Non Cooperation Movement) in India	A	references and Present through PPT. Viewing the relevant Snippets from the movies/ video clippings depicting various events involving Gandhiji and other leaders and present findings
III. The Making of a Global World  Subtopic 1 The premodern world	CG-7 Develops an understanding of the economy of a nation, with specific reference to India.	C-2.3 Traces aspects of continuity and change in different phases of world history (including cultural trends, social and religious reforms, and	A	Summarize the changes that transformed the world in terms of economy, political, cultural and technological areas.		Initiate an Inquiry based learning using world café' strategy and present your findings through café conversation strategy of each area (transformed the world in terms of economy, political,

Subtopic 2 19th century 1815 -1914 Subtopic 3 The inter- war economy Subtopic 4 Rebuilding of world economy: the post war era.  Inter disciplinary Project with chapter 7 of Geography: Lifelines of National Economy and chapter 4 of Economics: Globalization and the Indian		economic and political transformations)  C-7.4 Traces the beginning and importance of largescale trade and commerce (including ecommerce) between one country and another—the key items of trade in the beginning, and the changes from time to time.  Refer Annexure IV	AAA	the present day. Enumerate the	A A	cultural and technological aspects.) Art integration and gallery walk to depict the interconnectedness. Students examine the photographic display/ new paper cutting that depict the destructive impact of colonialism on the livelihoods of colonised people and present their understandings in the form of Newsletter/ cartoon strips/ Inter Disciplinary Project
IV The Age of Industrialisation	CG-2 Analyses the important phases in world history and draws insights to understand the present-day world	C-2.4 Explains the growth of new ideas and practices across the world (including humanism, mercantilism,	<b>&gt;</b>	Watch relevant Videos/ Visuals/ documentaries/ the movie clippings on features of Pre & Post economic, political,	A	Enumerate economic, political, social features of Pre and Post Industrialization. Analyse and infer how the industrialization impacted

		industrialisation, scientific developments and explorations, imperialism, colonialism, the rise of new nation-states across the world, and various technologies including the most current) and how they affected the course of world history		social features of Pre and Post Industrialization		colonies with specific focus on India
V Print culture and the Modern World	CG-2 Analyses the important phases in world history and draws insights to understand the present-day world.  CG-9 Understands and appreciates the contribution of India through history and present times, to the overall field of Social Science, and the disciplines that constitute it	C-2.4 Explains the growth of new ideas and practices across the world (including humanism, mercantilism, industrialisation, scientific developments and explorations, imperialism, colonialism, the rise of new nation-states across the world, and various technologies including the most current) and how they affected the course of world history.	A A	Enumerate the development of Print from its beginnings in East Asia to its expansion in Europe and India. Comment on the statement that the print revolution was not just a way of producing book but profound transformation of people. Compare and contrast the old tradition of handwritten manuscripts versus the print technology. Summarise the role of Print revolution and its impact	AAAA	Flow chart to depict the development of Print. Declamation on the profound transformation of people due to the print revolution. Use of Venn diagram to compare the advantages of handwritten books and the printed books Interpret and infer from pictures, cartoons, extracts from propaganda literature on important events and issues with focus on print culture.

	Political Science: Democratic Politics - II							
Content	Curricular goals	Competency		Learning outcome		Suggestive Pedagogical process		
1.Power - sharing	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.4 Analyses the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government	AAAAAA	Enumerate the need for power sharing in democracy. Analyse the Challenges faced by countries like Belgium and Sri Lanka ensuring effective power sharing. Compare and contrast the power sharing of India with Sri Lanka and Belgium. Summarize the purpose of power sharing in preserving the unity and stability of a country	AAAAA	Read relevant Newspaper articles/ clippings on Power sharing and present the findings in the form of flow chart.  Discuss various forms of power-sharing.  Classroom discussion on challenges faced by Belgium& Sri Lanka in ensuring effective power sharing.  Socratic discussion on Power Sharing Techniques used by India, Sri Lanka and Belgium.		
2 Federalism	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.2 Appreciates fundamental Constitutional values and identifies their significance for the prosperity of the Indian nation	AAA	Infer and appreciate how federalism is being practised in India. Analyse and infer how the policies and politics that has	A	Group discussion on the distribution of powers between Union and state Government and present the outcomes through presentations.  Debate on policies and politics that strengthens Federalism in		

				strengthens federalism in practice.		practice and present through mind map
3.Gender, Religion and Caste	CG-6 Understands and analyses social, cultural, and political life in India over time – as well as the underlying historical Indian ethos and philosophy of unity in diversity – and recognises challenges faced in these areas in the past and present and the efforts (being) made to address them	C-6.2 Understands that, despite C-6.1, forms of inequality, injustice, and discrimination have occurred in different sections of society at different times (due to internal as well as outside forces such as colonisation), leading to political, social, and cultural efforts, struggles, movements, and mechanisms at various levels towards equity, inclusion, justice, and harmony, with varying outcomes and degrees of success.	A A	Examines the role and differences of Gender, religion and Caste in practicing Democracy in India. Analyses the different expressions based on these. differences are healthy or otherwise in a democracy	A	Skit/ street play to enumerate how the differences in gender, religion and caste impact the practicing healthy or otherwise in a Democracy. Graphic method to analyse and infer how different expressions based on differences in Gender, Religion and Caste are healthy or unhealthy in a democracy
4.Political Parties	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.3 Explains that fundamental rights are the most basic human rights, and they flourish when people also perform their fundamental duties		Understand the process of parties getting elected.  Know the significance of right to vote and exercise the duties as citizen of nation.  Examine the role, purpose and no. of Political Parties in Democracy.		<ul> <li>Mock election to learn the process.</li> <li>Role play and create awareness of fundamental duties.</li> <li>Use flow chart to bring out the role, purpose and no. of Political Parties.</li> <li>Read newspapers, watches video clippings to justify the contributions /non contributions made by</li> </ul>

1.Resources and Development	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the	C-4.4 Analyses and evaluates the interrelationship between the natural environment and human beings and their cultures across regions and, in the case of India, the special environmental ethos	Enumerates how the resources are interdependent, justify how planning is essential in judicious utilization of resources and the need to develop them in India.	<ul> <li>process</li> <li>Brainstorming on how the resources are interdependent in nature and the need to develop them in India and present in the form of a Venn diagram.</li> <li>Use of maps, charts, and other tools to identify patterns and trends of land utilization.</li> </ul>
Content	Curricular goals	Geography: Contempo	rary India - II Learning outcome	Suggestive Pedagogical
5.Outcomes of Democracy	CG-5 Understands the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government	C-5.5 Analyses the critical role of non-state and non-market participants in the functioning of a democratic government and society, such as the media, civil society, socio-religious institutions, and community institutions.	<ul> <li>Justifies the contributions /non contributions made by national and regional political parties in successful functioning of Indian democracy.</li> <li>Enumerates how a success of democracy depends on quality of government, economic wellbeing, in equality, social differences, conflict, freedom and dignity.</li> </ul>	national and regional political parties in successful functioning of Indian democracy.  Paraphic organizer to enumerates how a success of democracy depends on quality of government, economic wellbeing, in equality, social differences, conflict, freedom and dignity.

		that resulted in practices of nature conservation	>	Infers the rationale for development of resources. Analyse and evaluate data and information related to non-optimal land, utilization in India Appraise and infer the need to conserve all resources available in India. suggest remedial measures for optimal utilization of underutilized resources	> >	Case study and debate on the topic "Is the development acting as an adversary for conservation".  Present a report in the form of PPT.
2. Forest and Wildlife Resources	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation	<i>A</i>	Examine the importance of conserving forests and wildlife and their interdependency in maintaining the ecology for the sustainable development of India.  Analyse the role of grazing and wood cutting in the development and degradation	A A A	Read newspaper articles/ watch videos on deforestation and need for conservation and through world café strategy present your findings. Discuss how developmental works, grazing wood cutting have impacted on the survival forests Use art integration strategy to summarize and present the reasons for conservation of biodiversity in India under sustainable development.

			<b>&gt;</b>	Summarizes the reasons for conservation of biodiversity in India under sustainable development.		
3.Water Resources	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.	C-4.2 Explains important geographical concepts, characteristics of key landforms, their origin, and other physical factors of a region.	A	Examine the reasons for conservation of water resource in India.  Analyse and infer how the Multipurpose projects are supporting the requirement of water in India.	A	Brainstorming session to discuss the scarcity of water and present through graphic organizers.  Prepare a PPT to Summarize the roles of Multipurpose projects in supporting the water requirement of India
4. Agriculture	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.3 Draws interlinkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife	A A	Examine the crucial role played by agriculture in our economy and society. Analyses the challenges faced by the farming community in India. Identifies and summarizes various aspects of agriculture, including crop production,	AAA	Group Discussion on the challenges faced by farmers, such as low productivity, lack of modern technology, inadequate irrigation facilities, and post-harvest losses and present the findings through PPT/chart.  Collect Newspaper and have a panel discussion on the challenges faced by the farming community in India Use of graphic organizers to distinguish the traditional and modern farming methods

			<b>A</b>	types of farming, modern agricultural practices, and the impact of agriculture on the environment. Analyses the challenges faced by the farming community in India		
5. Minerals and Energy Resources	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation.	A A	Differentiates between the conventional and nonconventional sources of energy. Analyses the importance of minerals and natural resources for economic development of the country. Suggests strategies for sustainable use of natural resources	A	Use graphic organizers to infer the resource distribution to real-world situations and lists the strategies for sustainable use of natural resources. Use of flow chart to Differentiate between the conventional and nonconventional sources of energy
6.Manufactur-ing Industries	CG-4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and	<b>\(\rightarrow\)</b>	Enumerates the impact of manufacturing industries on the environment and develop strategies for sustainable development of the	A	Use of flow chart to differentiate between various types of manufacturing industries based on their input materials, processes, and end products. Utilizes the textual information (data given through various

7.Life Lines of National	livelihoods, culture, and the biodiversity of the region	loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them  Inter disciplinary project with chapter 2 of History:	manufacturing sector.  Differentiates between various types of manufacturing industries based on their input materials, processes, and end products, and analyse their significance in the Indian economy.  Analyses the relation between the availability of raw material and location of the industry  Refer Annexure IV	maps/ graphs) to enumerate the impact of manufacturing industries on the environment and develop strategies for sustainable development of the manufacturing sector.  > Uses case studies to Infer the relation between availability of raw material and location of the industry.  Refer Annexure IV
Economy		with chapter 3 of History: The making of a Global world and chapter 4 of Economics: Globalization and the Indian Economy		
	Econ	omics: Understanding Eco	onomic Development	
Content	Curricular goals	Competency	Learning outcome	Suggestive Pedagogical process
1 Development	CG-8 Evaluates the economic development of a country in terms of	C-8.1 Gathers, comprehends, and analyses data related to income, capital, poverty,	<ul> <li>Enumerate and examine the different processes involved in setting</li> </ul>	<ul> <li>Hot seat strategy to enumerate different developmental Goals that helps in nation building.</li> </ul>

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	its impact on the lives of its people and nature.	and employment in one's locality, region and at the national level.  C-8.4 Describes India's recent path towards again becoming one of the three largest economies of the world, and how individuals can contribute to this economic progress.  C-8.5 Appreciates the connections between economic development and the environment, and the broader indicators of societal wellbeing beyond GDP growth and income.	A	developmental Goals that helps in nation building. Analyse and infer how the per capita income depicts the economic condition of the nation. Evaluate the development goals that have been set for the nation by the Planning commission of India -with specific reference to their efficacy, implemental strategies, relevance to current requirements of the nation. Compare and contrast the per capita income of some countries and infer reasons for the variance. Analyses the multiple perspectives on the need of	A	Case study to analyse and infer how the per capita income depicts the economic condition of the nation.  Graphic organizer to compare the t relation between HDI (Human Development Index) and PCI (Per Capita National Income)  Declamation to Analyse the multiple perspectives on the need of development.  Debate on 'Health and Education are the true indicators of development.'
				development.		
_	CG-7 Develops an	C-7.1 Defines key	>	Analyses and infer	>	Data analysis of various
2	understanding of the	features of the economy		how the economic		sectors and their contribution

## Sectors of the Indian Economy

economy of a nation, with specific reference to India

such as production, distribution, demand. supply, trade, and commerce, and factors that influence these aspects (including technology) C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India C-7.3 Distinguishes between 'unorganised' and 'organised' sectors of the economy and their role in production for the local market in small. medium, and large-scale production centres (industries), and recognises the special importance of the socalled 'unorganised' sector in Indian economy and its connections with the self-organising features of Indian society.

- activities in different sectors contribute to the overall growth and development of the Indian economy.
- Propose solutions to identified problems in different sectors based on their understanding.
- Summarize how the organised and unorganised sectors are providing employment and the challenges faced by them.
- ➤ Enumerates the role of unorganised sector in impacting PCI (Per Capita Income) currently and proposes suggestive steps to reduce the unorganised sector for more productive contributions to GDP.
- Enumerates and infer the essential role of the Public and Private sectors

- in GDP (Gross domestic Product) and NDP (Net Domestic Product).
- Research based strategy to propose solutions to identified problems in different sectors based on their understanding.
- Read Newspaper articles and group discuss to Summarize how the organised and unorganised sectors are providing employment and the challenges faced by them.
- Role plays of case studies explaining underemployment/disguised unemployment.
- Class conversation/group discussion on how to create more employment.

4 Globalization and the Indian Economy Subtopics:	CG-7 Develops an understanding of the economy of a nation, with specific reference to India. CG-8 Evaluates the economic development of a country in terms of its impact on the lives	society C-7.4 Traces the beginning and importance of large-scale trade and commerce (including e-commerce) between one country and another – the key items of trade in the beginning, and the	<b>&gt;</b>	Enumerate the concept of globalization and its definition, evolution, and impact on the global economy.  Evaluate the key role of the key major drivers of	<b>A</b>	Watch videos on globalisation followed by an interactive group discussion to enumerate the concept of globalization and its definition, evolution, and impact on the global economy.  Read Textual and other resources to analyse and infer
3 Money and Credit	CG-8 Evaluates the economic development of a country in terms of its impact on the lives of its people and nature.	C-8.1 Gathers, comprehends, and analyses data related to income, capital, poverty, and employment in one's locality, region and at the national level.  Markets.  C-8.3 Understands these features in the context of ancient India, with its thriving trade, both internal and external, and its well-established trade practices and networks, business conventions, and diverse industries, all of which made India one of the world's leading economies up to the colonial period	>	the present trends of PPP and efficacy of the initiative.  Enumerate how money plays as a medium exchange in all transactions of goods and services since ancient times to the present times. Analyse and infer various sources of Credit.  Summarizes the significance and role of self-help groups in the betterment of the economic condition of rural people/ women.	A A	Group discussion to Enumerate how money plays as a medium exchange in all transactions of goods and services since ancient times to the present times. Case based study to Analyse and infer various sources of Credit. Guest Speaker Programme (bank manager/ a self-help group member) who will summarize the significance and role of self-help groups in the betterment of the economic condition of rural people/ women.

What is Globalization? Factors that have enabled Globalisation.	of its people and nature	changes from time to time. C-8.3 Understands these features in the context of ancient India, with its thriving trade, both internal and external, and its well-established trade practices and networks, business conventions, and diverse industries, all of which made India one of the world's leading economies up to the colonial period.	globalization and their role in shaping the global economic landscape in various countries. Comprehends the significance of role of G20 and its significance in the light of India's present role.	<b>A</b>	the key drivers of globalization and their role in shaping the global economic landscape. Discussions /Debates on the positive impact of Globalization on the lives of people.
Inter disciplinary Project with chapter 3 of History: "The making of a Global World". And chapter 7 of Geography: "Lifelines of National Economy" Subtopics: Production across the countries Chinese toys in India		Refer Annexure IV			

World Trade Organization				
The Struggle for A Fair Globalisation				
5	Project work	Refer Annexure III	Refer Annexure III	
Consumer Rights OR Social Issues OR Sustainable Development				

## CLASS X LIST OF MAP ITEMS

Subject	Name of the Chapter	List of areas to be located/labeled/identified on the map
History	Nationalism in India	I. Congress sessions:
-		1920 Calcutta
		• 1920 Nagpur
		1927 Madras session
		II. 3 Satyagraha movements:
		Kheda
		Champaran
		Ahmedabad mill workers
		III. Jallianwala Bagh
	<u> </u>	IV. Dandi March
Geography	Resources and Development	Identify Major Soil Types
	Water Resources	Locating and Labeling:
		Salal
		Bhakra Nangal     Talair
		Tehri     Description
		Rana Pratap Sagar     Sandar Sarayar
		Sardar Sarovar     Hisphan d
		Hirakund     Negarius Sagar
		Nagarjun Sagar     Tub gabbadga
	Agriculture	Tuhgabhadra  Idontifu
	Agriculture	Identify:  • Major areas of Rice and Wheat
		<ul> <li>Major areas of Rice and Wheat</li> <li>Largest/Major producer states of Sugarcane, Tea, Coffee, Rubber, Cotton and</li> </ul>
		Jute
	Minerals and Energy	
	Resources	a. Iron Ore mines
		Mayurbhanj
		• Durg
L		g

	Bailadila
	Bellary
	Kudremukh
	b. Coal Mines
	Raniganj
	Bokaro
	Talcher
	Neyveli
	c. Oil Fields
	Digboi
	Naharkatia
	Mumbai High
	Bassien
	Kalol
	Ankaleshwar
	Locate and label: Power Plants
	a. Thermal
	Namrup
	Singrauli
	Ramagundam
	b. Nuclear
	Narora
	Kakrapara
	Tarapur
	Kalpakkam
Manufacturing Industries	I. Manufacturing Industries
	(Locating and labeling only)
	Cotton textile Industries: a. Mumbai, b. Indore, c. Surat, d. Kanpur, e.
	Coimbatore

	•	Iron and Steel Plants: a. Durgapur, b. Bokaro, c. Jamshedpur, d. Bhilai, e.			
		Vijayanagar, f. Salem			
	•	Software technology Parks: a. Noida, b. Gandhinagar, c. Mumbai, d. Pune,			
		e. Hyderabad, f. Bengaluru, g. Chennai, h. Thiruvananthapuram			
Life		ting and Labeling:			
	a.	Major Sea Ports			
	•	Kandla			
	•	Mumbai			
	•	Marmagao			
	•	New Mangalore			
	•	Kochi			
	•	Tuticorin			
	•	Chennai			
	•	Visakhapatnam			
	•	Paradip			
	•	Haldia			
	b.	International Airports			
	•	Amritsar (Raja Sansi-Sri Guru Ram Dasjee)			
	•	Delhi (Indira Gandhi)			
	•	Mumbai (Chhatrapati Shivaji)			
	•	Chennai (Meenam Bakkam)			
	•	Kolkata (Netaji Subhash Chandra Bose)			
	•	Hyderabad (Rajiv Gandhi)			

Note: Items of Locating and Labelling may also be given for Identification.

# CLASS X QUESTION PAPER DESIGN

## Subject Wise Weightage

Subject	Syllabus	Marks (80)	Percentage
History	<ul> <li>The Rise of Nationalism in Europe.</li> <li>Nationalism in India:</li> <li>The Making of a Global World Sub topics1 to 1.3</li> <li>Print Culture and the Modern World</li> <li>Map pointing</li> </ul>	18+2	25%
Political Science	<ul> <li>Power – sharing</li> <li>Federalism</li> <li>Gender, Religion and Caste</li> <li>Political Parties</li> <li>Outcomes of Democracy</li> </ul>	20	25%
Geography	<ul> <li>Resources and Development</li> <li>Forest and Wildlife Resources</li> <li>Water Resources</li> <li>Agriculture</li> <li>Mineral&amp; Energy resources</li> <li>Manufacturing industries.</li> <li>Lifelines of National Economy (map pointing)</li> <li>Map pointing</li> </ul>	17+3	25%
Economics	<ul> <li>Development</li> <li>Sectors of the Indian Economy</li> <li>Money and Credit</li> <li>Globalization and The Indian Economy Sub topics:</li> <li>What is Globalization?</li> <li>Factors that have enabled Globalisation</li> </ul>	20	25%

# Weightage to Type of Questions

Type of Questions	Marks (80)	Percentage
1 Mark MCQs (20x1) (Inclusive Of Assertion, Reason, Differentiation &Stem)	20	25%
2 Marks Narrative Questions (4x2) (Knowledge, Understanding, Application, Analysis, Evaluation, S	8	10%
ynthesis & Create)		18.75%
3 Marks Narrative Questions (5x3) (Knowledge, Understanding, Application, Analysis, Evaluation, Synthesis & Create)	15	10.75%
4 MARKS Case Study Questions (3x4) (Knowledge, Understanding, Application, Analysis, Evaluation, Synthesis & Create)	12	15%
<b>5 Mark Narrative Questions (4x5)</b> (Knowledge,Understanding,Application,Analysis,Evaluation,S ynthesis & Create)	20	25%
Map Pointing	5	6.25%

# Weightage to Competency Levels

Sr. No.	Competencies	Marks (80)	Percentage
1	Remembering and Understanding: Exhibiting memory of previously learned material by recalling facts, terms, basic concepts, and answers; Demonstrating understanding of facts and ideas by organizing, translating, interpreting, giving descriptions and stating main ideas.	24	30%
2	Applying: Solving problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	11	13.25%
3	Formulating, Analysing, Evaluating and Creating:  Examining and breaking information into parts by identifying motives or causes; Making inferences and finding evidence to support generalizations; Presenting and defending opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria;  Compiling information together in a different way by combining elements in a new pattern or proposing alternative solutions.	40	50%
4	Map Skill	5	6.25%
	Total	80	100%

CLASS X
GUIDELINES FOR INTERNAL ASSESSMENT: 20 MARKS

Type of Assessment	Description	Marks Allocated
Periodic Assessment	Pen Paper Test.	5
Multiple Assessment	Quiz, debate, role play, viva, group discussion, visual expression, interactive bulletin boards, gallery walks, exit cards, concept maps, peer assessment, Self-assessment etc. through Inter disciplinary project	5
Subject Enrichment Activity	Project Work on Consumer Rights OR Social Issues OR Sustainable Development	5
Portfolio	Classwork, Work done (activities/ assignments) reflections, narrations, journals, etc. Achievements of the student in the subject throughout the year  Participation of the student in different activities like heritage India quiz	5

# CLASS X PRESCRIBED TEXT BOOKS

S.No.	Subject	Name of the Book	Publisher
1	History	India and the Contemporary World-II	NCERT
2	Political Science	Democratic Politics-II	NCERT
3	Geography	Contemporary India-II	NCERT
4	Economics	Understanding Economic Development	NCERT
5	Disaster Management	Together, towards a safer India- Part III	CBSE

Note: Please procure latest reprinted edition (2024-25) of prescribed NCERT textbooks.

#### **ANNEXURE I**

## **Project Work: Class IX**

Project work	10 periods	
Every student must undertake one project on Disaster Management	The students will develop the following competencies:	
Objectives: The main objectives of giving project work on Disaster	Collaboration	
Management to the students are to:	Use analytical skills.	
<ul> <li>To create awareness in them about different disasters, their consequences and management</li> </ul>	Evaluate the situations during disasters.	
To prepare them in advance to face such situations	Synthesize the information.	
●To ensure their participation in disaster risk reduction plans	Find creative solutions.	
To enable them to create awareness and preparedness among the	Strategies the order of solutions.	
community.	Use right communication skills.	
• The project work helps in enhancing the Life Skills of the students.		
Various forms of art must be integrated in the project work.		

#### **Guidelines:**

To realize the expected objectives, it would be required of the principals / teachers to muster support from various local authorities and organizations like the Disaster Management Authorities, Relief, Rehabilitation and the Disaster Management Departments of the States, Office of the District Magistrate/ Deputy Commissioners, Fire Service, Police, Civil Defence etc. in the area where the schools are located.

The project carried out by the students should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.

The distribution of marks over different rubrics relating to Project Work is as follows:

S.no	Aspects	Marks
а	Content accuracy, originality and collaborative skills	2
b	Competencies exhibited and Presentation	2
С	Viva	1

- > All documents pertaining to assessment under this activity should be meticulously maintained by the schools.
- ➤ A Summary Report should be prepared highlighting:
  - objectives realized through individual work and group interactions.
  - calendar of activities.
  - innovative ideas generated in the process.
  - list of questions asked in viva voce.
- > It is to be noted here by all the teachers and students that the projects and models prepared should be made from eco-friendly products without incurring too much expenditure.
- ➤ The Project Report can be handwritten or digital.
- The Project Work needs to enhance cognitive, affective and psychomotor skills of the learners. It will include self-assessment and peer assessment, and progress of the child in project-based and inquiry-based learning, art integrated activities, experiments, models, quizzes, role plays, group work, portfolios, etc., along with teacher assessment. (NEP-2020)
- The Project work can culminate in the form of Power Point Presentation/Exhibition/Skit/albums/files/song and dance or culture show /story telling/debate/panel discussion, paper presentation and whichever is suitable to Visually Impaired Candidates.)
- > The record of the project work (internal assessment) should be kept for a period of three months for verification, if any.

## **ANNEXURE II**

Interdisciplinary Project: Class-IX

Subject and Chapter No	Name of the Chapter	Suggested Teaching Learning Process	Learning Outcomes with Specific Competencies	Time Schedule For Completion
History Chapter IV	Forest Society and Colonialism	Interdisciplinary project Teachers can make use of the pedagogies in facilitating the students in completion of Inter Disciplinary Project  Constructivism Inquiry based learning Cooperative learning Research based learning. Experiential learning. Art integration  Multiple Assessment: Ex. Surveys / Interviews / Research work/ Observation/ Story based Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, /group discussion, /visual expression/ interactive bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self-	Compare the forest situations prevailed at pre- colonial, colonial and post- colonial era.  Evaluate the growth &role of commercial forestry in different types of Vegetation.  Analyse the reasons for rebellions at forest areas of south East-Asia with specification to JAVA.  To defend the role of government and the local communities in protecting the forest cover.	School under the guidance of teacher. (Carryover of project to home must be strictly avoided)

		assessment/integration of technology etc.		
Geography	Natural Vegetation		To devise ways to	
Chapter 5	and Wildlife		protect the forest vegetation and wildlife	
			in India.	

#### **Guidelines for Inter Disciplinary Project:**

It involves combining 2 or more disciplines into one activity-more coherent and integrated. The generally recognized disciplines are economics, History, Geography, Political Science, A sample plan has been enclosed. Kindly access the link given below-

https://docs.google.com/document/d/1668TKkRt80r4-kbjJ Y7zg4mF3Vq1Y9k/edit.

## Plan of the project:

A suggestive 10 days' plan given below which you may follow, or you can create on your own, based on the templates provided below.

#### **Process:**

 Initial collaboration among students to arrange their roles, areas of integration, area of investigation and analysis, roles of students.

Team leader: Main collaborator
Team members:
Note: Teacher to allocate the roles as per the abilities of the students.

- Final submission based on course deliverables as given in the template below the 10-day plan.
- Assessment Plan: to be done by the teacher clearly mentioning the Rubrics.
- Report, poster and video acknowledgements: reflections & expression of gratitude as given in the template given below

## Class IX Interdisciplinary project

## 10 days suggestive plan

10 periods

## Day 1-2: "Colonialism and Forest Society"

Discuss the impact of colonialism on forest societies and explore the concept of forest as a resource in colonialism.

Group project: Research and present a PPT on the colonial forest policy and its impact on forest societies.

Day 3-4: "Rebellion in the Forest"

Analyse the causes and effects of forest-based rebellions in history

Watch the following film Group discuss about forest tribes of your state and the exploitations they face. Refer Annexure VI for Rubrics. https://www.youtube.com/watch?v=N6SR0REa\_YA

## Day 5-6: Forest Transformations in Java, Tropical Evergreen Forests

Examine the impact of human activity on forests in Java.

Explore how changes in land use, agriculture, and industry have impacted the forests. Students can research the history of forest transformations in Java and their impact on the environment.

Study the transformation of forests in Java, from pre-colonial to post-colonial times.

Compare and contrast the conversion of forest into agricultural land and the need.

Through group discussions find solutions. Present an art integrated project.

Discuss the characteristics of tropical evergreen forests, including their climate, soil, and flora/fauna. Students can research specific examples of tropical evergreen forests and the challenges they face, such as deforestation and climate change.

Group project: watch the video through the link https://www.youtube.com/watch?v=MI0xvHsBigI

Analyse and present the impact of forest transformations on society, economy and environment in Java. Compare and contrast it with India.

Present a PPT of your learnings. Refer Annexure VI for rubrics

**Day 7-8**: Discuss how colonialism has affected the forest's biodiversity and the survival of indigenous communities living in and around the forest

**Group activity:** Divide the group into smaller teams and assign them tasks related to identifying the impact of colonialism on different types of forests. For example, one team can research the impact of colonialism on forest fires, while another team can research the impact of colonialism on the survival of indigenous plants and animals. Make the students use cartoon strips to present their findings.

**Day 9-10:** Make the students to compile all the findings of 8 days' work and present in PPT and through the template given in Annexure V.

## **ANNEXURE III**

C	lass X - Project Work 10 perio	iods 5 marks
	very student must undertake one project on onsumer Awareness OR Social Issues OR Sustaina	The students will develop the following competencies:
D	evelopment	Collaboration
•	<b>Objectives:</b> The overall objective of the project work is to help students gain	in an Use analytical skills.
	insight and pragmatic understanding of the theme and see all the	the • Evaluate the situations during disasters.
	Social Science disciplines from an interdisciplinary perspective.	Synthesize the information.
•	It should also help in enhancing the Life Skills of the students.	Find creative solutions.
Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.		Strategies the order of solutions
		Use right communication skills
•	If required, students may go out for collecting data and use different primary and secondary resources to prepare the project.	ferent
•	If possible, various forms of art may be integrated in the project work.	pt

## **Guidelines:**

The distribution of marks over different rubrics relating to Project Work is as follows:

S.no	Rubrics	Marks
а	Content accuracy, originality and collaborative skills	2
b	Competencies exhibited and Presentation	2
С	Viva	1

- 1. The project carried out by the students should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.
- 2. All documents pertaining to assessment under this activity should be meticulously maintained by the schools.
- 3. A Summary Report should be prepared highlighting:
- objectives realized through individual work and group interactions;
- calendar of activities;
- innovative ideas generated in the process
- list of questions asked in viva voce.
- 4. It is to be noted here by all the teachers and students that the projects and models prepared should be made from eco-friendly products without incurring too much expenditure.
- 5. The Project Report can be handwritten or digital.
- 6. The Project Work needs to enhance cognitive, affective and psychomotor skills of the learners. It will include self-assessment and peer assessment, and progress of the child in project-based and inquiry-based learning, art integrated activities, experiments, models, quizzes, role plays, group work, portfolios, etc., along with teacher assessment. (NEP-2020)
- 7. Must be done at school only as specific periods are allocated for project work.
- 8. The Project work can culminate in the form of Power Point Presentation/Exhibition/Skit/albums/files/song and dance or culture show /story telling/debate/panel discussion, paper presentation and whichever is suitable to Visually Impaired Candidates.
- 9. Records pertaining to projects (internal assessment) of the students will be maintained for a period of three months from the date of declaration of result for verification at the discretion of Board. Sub judice cases, if any or those involving RTI / Grievances may however be retained beyond three months.

## **ANNEXURE IV**

## Interdisciplinary Project: Class X

Subject and Chapter No	Name of the Chapter	Suggested Teaching Learning Process	Learning Outcomes with Specific Competencies	Time Schedule For Completion
History Chapter III Geography Chapter 7	Making of a Global World Lifelines of National Economy	The teachers may use the following pedagogies in facilitating the students in completion of Interdisciplinary Project.  1) Constructivism  2) Inquiry based learning  3) Cooperative learning  4) Learning station  5) Collaborative learning  6) Videos/ Visuals/ documentaries/ movie clippings  7) Carousel technique  8) Art integrated learning  9) Group Discussions  Multiple Assessment:  Ex. Surveys/ Interviews/ Research work/ Observation/ Story based	<ul> <li>Analyse the implication of globalization for local economies.</li> <li>Discuss how globalization is experienced differently by different social groups. Enumerates how the transportation works as a lifeline of economy.</li> <li>Analyse and infer the impact of roadways and railways on the national economy.</li> <li>Analyses and infers the challenges faced by the roadways and railway sector in India</li> </ul>	The schools to do IDP between the months of April and September at the School under the guidance of teacher. (Carryover of project to home must be strictly avoided)
Economics Chapter 4	Globalization and the Indian Economy	Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, /group discussion, /visual expression/ interactive bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self-assessment/integration of technology etc.	<ul> <li>Integrate various dimensions of globalisation in terms of cultural / political/ social /economical aspects)</li> <li>Appraise the evolution of Globalisation and the global trends</li> <li>Investigate the factors that facilitated the growth on MNC 's</li> </ul>	

#### **Guidelines:**

- It involves combining 2 or more disciplines into one activity-more coherent and integrated. The generally recognized disciplines are economics, History, Geography, Political Science, a sample plan has been enclosed) Kindly access the link given below
- Methodology (A sample interdisciplinary project plan Link has been provided to get an insight about IDP.
- Topic: The Making of a Global World, Globalisation and Life lines of Economy

https://docs.google.com/document/d/1dlwwFeaSrExJHMtkzcEuoq3ehh-7FtHM/edit

## Plan of the project:

A suggestive 10 days' plan given below which you may follow or you can create on your own, based on the templates provided below

#### **Process:**

Initial collaboration among students to arrange their roles, areas of integration, area of investigation and analysis, roles of students

## Class X: 10-day Suggestive plan for Interdisciplinary Project

## Day 1: Introduction to the Interdisciplinary Project and Setting the Context:

Brief overview of the project and its objectives to be given by the teachers.

History teacher to Introduce the historical context of the World War II and its aftermath through inquiry method.

Make the students to Group discuss the impact of World War II on the global economy. Teacher to refer annexure III for rubrics)

## **Day 2: The Great Depression:**

Students to watch a video from the link, <a href="https://www.youtube.com/watch?v=62DxELjuRec">https://www.youtube.com/watch?v=62DxELjuRec</a> and

#### https://www.youtube.com/watch?v=gqx2E5qIV9s

and discuss the causes and consequences of the Great Depression and the role of mass production and consumption in the Great Depression. Present a group PPT /report on consequences of the Great Depression on the global economy.

#### Day 3: India and the Great Depression:

Students to collect material related to India's economic condition during the Great Depression and relate it to the present economic condition of India and US. Students may collect information through a visit to the library.

As a group activity they need to present a collage of their findings. (Refer Annexure VI for Rubrics)

#### Day 4: Rebuilding the World Economy and Interlinking Production across countries

- Teachers to use Jigsaw method to make the students to sit in groups and to give each group a part of the handout with information about process taken to rebuild economy and how the production across countries got interlinked. Make the groups to compile the information by moving from group to group.
- Make them discuss the post-war recovery efforts and their impact on the global economy
- Study the role of the Bretton Woods Institutions in rebuilding the world economy and present their learnings through Art Integrated Project. Refer Annexure VI for rubrics.

Day 5: The Early Post-War Years: The role of roadways, railways, waterways and airways in building the national economy

- The teacher distributes the Handout 1 given below to the groups and asks them to find answers to the questions posed at the end of Hand out and present it in groups using Café conversations mode. Refer Annexure III for rubrics.
- Study the challenges faced by the world in the early post-war years
- Discuss the efforts made towards decolonization and independence of nations

#### Day 6: Post war settlement and Bretton Woods institutions

• Make the students read the material given in <a href="https://en.wikipedia.org/wiki/Bretton\_Woods\_system">https://en.wikipedia.org/wiki/Bretton\_Woods\_system</a> and debate the impact of Bretton Woods institutions in the post war economy. Refer Annexure VI for Rubrics.

## Day 7: Decolonization and Independence - The Role of World Trade Organization:

- The students will read the handout 2 given below and present a role play of the support rendered by the World Trade Organisation in building new nations. Refer Annexure VI for rubrics
- Introduction to the World Trade Organization
- Study the role of the WTO in promoting fair trade practices

## Day 8: End of Bretton Woods and the Beginning of Globalization:

- The students will read material given in the link
   <a href="https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20Bretton%20Woods%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20Bretton%20Woods%20system,-</a>
   <a href="https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20Bretton%20Woods%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20Bretton%20Woods%20system,-</a>
   <a href="https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20Bretton%20Woods%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20Bretton%20Woods%20system,-</a>
   <a href="https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20the%20system,-">https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20U.S.%20President,the%20breakdown%20of%20U.S.%20Dreakdown%20of%20U.S.%20Dreakdown%20of%20U.S.%20Dreakdown%20of%20U.S.%20Dreakdown%20Of%20U.S.%20Dreakdown%20Of%20U.S.%20Dreakdown%20Of%20U.S.%20Dre
- Organise an interview with a financial expert/economist/ lecturer/professor. Based on the information they gathered, the students can submit a report on the findings.
- Discuss the reasons for the end of the Bretton Woods system

## Day 9: Impact of Globalization in India and role of waterways and airways

https://www.jagranjosh.com/general-knowledge/new-economic-policy-of-1991-objectives-features-and-impacts-1448348633-1

- The students will read the material given in the above link, and design a report on what would have happened to India if this stand wasn't taken and present it as a radio talk show. They will link the role of waterways and airways in the achievement of India in globalisation.
- Study the impact of globalization on the Indian economy
- Discuss the challenges faced by India in the process of globalization

## Day 10. Final presentation

• Conclude the interdisciplinary project and summarize the key takeaways.

## Handout 1 for Day 4 of Inter Disciplinary Project of Class X

#### Handout Title: The Role of Waterways and Airways in Post-World War II- World and India

Introduction: After the end of World War II, the world faced significant economic, social, and political changes. The role of waterways and airways in shaping the post-war world and India is crucial to understand. In this handout, we will discuss the impact of waterways and airways on the global economy and how it helped India in its development.

Waterways: In the post-World War II era, waterways played a crucial role in the movement of goods and people. The improvement of ports and waterways allowed for more efficient transportation of goods and helped to spur economic growth.

The increased demand for goods and services, combined with the development of shipping technologies, allowed for the expansion of international trade. This helped to boost the world economy and allowed for the growth of industries in many countries, including India.

In India, the development of waterways and ports helped to improve the country's economy. The country's long coastline and several rivers made it an ideal location for the transportation of goods. The growth of ports and waterways in India allowed for the movement of goods from one part of the country to another, helping to spur economic growth and development.

Airways: After World War II, the development of air transportation revolutionized the world's economy. The expansion of air travel allowed for faster and more efficient transportation of goods and people, which helped to boost the world economy.

In India, the growth of airways helped to connect different parts of the country and made it easier for people and goods to move from one place to another. This helped to spur economic growth and development in India.

The growth of air transportation in India also allowed for the expansion of international trade. Indian businesses could now easily access foreign markets, which helped to boost the country's economy.

#### Conclusion:

The role of waterways and airways in the post-World War II world and India was crucial in shaping the economic and social landscape of these countries. The development of these transportation modes helped to spur economic growth and allowed for the expansion of international trade. Understanding the impact of waterways and airways on the world and India is crucial in understanding the economic and social changes that took place after World War II.

#### **Questions:**

- 1. Mention the role of major ports in imports and exports.
- 2. Emergence of Deccan airways changed the entire functionalities of domestic airways> Substantiate the statement
- 3. The waterways and airways contribute to the economic growth of India. Substantiate your answer.

## Handout 2 for day 7 of Inter Disciplinary Project of Class X

Handout Title: The Role of the World Trade Organization (WTO) in Building New Nations Post-Colonialization

Introduction: After the end of colonialism, many countries faced significant economic and political challenges as they worked to establish themselves as independent nations. The World Trade Organization (WTO) played a crucial role in helping these countries to rebuild their economies and participate in the global economy. In this handout, we will discuss the role of the WTO in building new nations post-colonialization.

What is the WTO?

The WTO is an international organization that was established in 1995 to promote international trade and help countries participate in the global economy.

The WTO provides a forum for countries to negotiate and enforce international trade agreements, and helps to ensure that trade is conducted in a fair and predictable manner. The organization also provides technical assistance and advice to help countries improve their trade policies and participate in the global economy.

How has the WTO helped new nations post-colonialization?

After colonial rule ended, many countries faced significant economic challenges as they worked to establish themselves as independent nations. The WTO helped these countries to participate in the global economy by providing a forum for trade negotiations and by helping to enforce international trade agreements.

The WTO also provided technical assistance and advice to help these countries improve their trade policies and participate in the global economy. This helped to spur economic growth and development in these countries, and allowed them to become more integrated into the global economy.

By participating in the global economy, new nations post-colonialization were able to expand their markets, attract foreign investment, and improve their economic performance. The WTO played a crucial role in helping these countries to build their economies and establish themselves as stable, independent nations.

#### Conclusion:

The WTO played a crucial role in building new nations post-colonialization by helping these countries to participate in the global economy. The organization's trade negotiations, enforcement of international trade agreements, and technical assistance helped to spur economic growth and development in these countries. Understanding the role of the WTO in building new nations post-colonialization is important in understanding the economic and political changes that took place after the end of colonial rule.

## **ANNEXURE V**

Presentation Template by the students - Class IX & X

Name of the Student:				
Members of Team:				
Class : Section:	Date of Submission:			
Topics of IDP:	•			
Title of the Project:				
Objectives:				
	vation/ Story based Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, re bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/echnology etc.			
Evidences: Photos, Excerpts from Interviews, observations, Videos, Research References, etc.				
Overall presentation: Link of PPT, shared documents, can be digital/handwritten, as per the convenience of the school.				
Acknowledgement:				
References (websites, books, newspaper etc)				
Reflections:				

## **ANNEXURE VI**

## **Rubrics for IDP**

Rubrics	Marks allocated
Research Work	1
Collaboration & Communication	1
Presentation & Content relevance	1
Competencies	2
Total	5