

SECONDARY SCHOOL CURRICULUM 2021-22



CENTRAL BOARD OF SECONDARY EDUCATION

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

Secondary School Curriculum 2021-22

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 ¹[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 the² [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;
- ¹(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. Ins. by the constitution (Eighty Sixth Amendment) 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 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 आदर्शों, 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;
- व्यिक्तगत और सामूहिक गितिविधियों 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 refers to the lessons and educational content to be taught to a learner in a school. In empirical terms, it may be regarded as the sum total of a planned set of educational experiences provided to a learner by a school. It encompasses general objectives of learning, competencies to be attained, courses of study, subject-wise learning outcomes and content, pedagogical practices and assessment guidelines. The curriculum provided by CBSE is based on National Curriculum Framework-2005 and seeks to provide opportunities for students to achieve excellence in learning.

1.2 Salient Features of the CBSE Secondary School Curriculum

The Curriculum prescribed by CBSE strives to:

- provide ample scope for holistic i.e. physical, intellectual and social development of students;
- 2. emphasize constructivist rather than rote learning by highlighting the importance of hands-on experience;
- enlist general and specific teaching and assessment objectives to make learning competency-based;
- 4. encourage the application of knowledge and skills in real-life problem solving scenarios;
- 5. uphold the 'Constitutional Values' by encouraging values-based learning activities;
- 6. promote Critical and Creative Thinking aligned to the 21st Century Skills in classrooms;
- 7. integrate innovations in pedagogy such as experiential 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;



- 8. promote inclusive practices as an overriding consideration in all educational activities;
- 9. enhance and support learning by different types of assessments; and
- 10. integrate environmental education in various disciplines from classes I- XII.

1.3 Objectives of the Curriculum

The Curriculum aims to:

- 1. achieve cognitive, affective and psychomotor excellence;
- 2. enhance self-awareness and explore innate potential;
- 3. attain mastery over laid down competencies;
- 4. imbibe 21st century learning, literacy and life skills;
- 5. promote goal setting, and lifelong learning;
- 6. inculcate values and foster cultural learning and iternational understanding in an interdependent society;
- 7. acquire the ability to utilize technology and information for the betterment of humankind;
- 8. strengthen knowledge and attitude related to livelihood skills;
- 9. develop the ability to appreciate art and show case talents;
- 10. Promote physical fitness, health and well-being.
- 11. Promote arts integrated learning.

1.4 Curriculum Areas at Secondary Level

CBSE envisions the all-around development of students in consonance with the holistic approach to education and therefore, has done away with



artificial boundary between the co-curricular domain and the curricular domain.

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

Languages 1	Compulsory
Languages 2	
Social Science	
Mathematics	
Science	
Elective Subjects	Optional
Health and Physical Education	Compulsory Subjects having only
Work Experience*	school based internal assessment
Art Education	

^{*} subsumed in Health and Physical Education



1.5 Curricular Areas:-

The curriculum envisages individual learning propensity and seeks to explore the potential of students in acquiring knowledge and skills. With greater orientation and research skills in core areas, students would evolve as judicious young adults with a sense of real self-estimate having true values and principles. The curricular areas are as follows:

- (i) Languages include Hindi, English and 37 other languages. The curricula in languages focus on listening, speaking, reading and writing skills and, hence, develop effective communicative proficiencies. Learners use language to comprehend, acquire and communicate ideas in an effective manner.
- (ii) Social Science (Geography, History, Economics and Political Science) intends to make learners understand their cultural, geographical and historical milieus and gain in-depth knowledge, attitude, skills and values necessary to bring about transformation for a better world. 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: (Biology, Chemistry and Physics) includes gaining knowledge about Food, Materials, The World of the Living, How things work, Moving things, People and Ideas, Natural Phenomenon and Natural Resources. The Focus is on knowledge and skills to develop a scientific attitude and to use and apply such 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 real-life situations and gain competencies that enable them to participate effectively and productively in life.

- (iv) 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.
- (v) Skills Electives- A well-skilled workforce is one of the key requirements for the prosperity and growth for any country. Some skills come from general education, but specific occupational skills are also important. Typically initial vocational education and training systems have a big part to play in supplying these skills. To develop skills and talents as a form of free expression, 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.

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** 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 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-defense, fitness and life style choices.
- (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.

1.6 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 NCF-2005. 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:

- (a) 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.
- (b) 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.
- (c) Prepare Annual Pedagogical Plan of the school by designing and developing annual plan for the school by giving equal importance to all areas.



- (d) 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.
- (e) Ensure joyful learning at all levels through use of such innovative pedagogy.
- (f) Develop school specific resources for teaching and learning, in the form of lesson plans, e-content, use of mathematics and science kits developed by NCERT, etc.
- (g) Ensure proper in-house training of teachers in the school to enable them to unleash their own unique capabilities and creativity in their classrooms.
- (h) 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.
- (i) 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:

To face the challenges of 21st Century, education should be competency based and Principals as Pedagogical Leaders must create conducive environment for the development of competencies among the students. Competency based Learning focuses on 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 Based Learning as they promote critical thinking, creativity and effective study skills among students. Learning Outcomes approach 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 changed in the light of these outcomes. 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 mapped each learning outcome with assessment to enable tracking of learning progress and these resources are available at the website of CBSE in the form of **Teachers Energized Resource Material**. Schools should also attempt this on their own.

2.5 Lesson/ Unit Plan

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

- Specific Learning Outcomes;
- Pedagogical Strategies;
- Group activities/experiments/hands-on-learning;
- Interdisciplinary Linkages and infusion of Life-skills, Values, Gender sensitivity etc.;
- Resources (including ICT);
- Assessment items for measuring the attainment of the Learning Outcome
- Feedback and Remedial Teaching Plan.
- Inclusive Practices

2.6 Classroom and School Environment

School environment should be conducive for holistic development of the students. The school should focus on health and hygiene by adopting inclusive practices. As part of the policy the school should adopt practices which will promote mental health. In this direction, the schools may follow the guidelines issued by the Board on making the school a No-Anger Zone or Anger Free Zone. The board has 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.

The surroundings and daily life activities and situations are the best experiential teachers for the students. Teachers must 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 art-based 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:

- (i) 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 key 21st century skills i.e. Learning Skills, Literacy Skills and Life Skills.

Learning skills include:

- Critical Thinking
- Creativity



- Communication
- Collaboration

Literacy skills include:

- Information literacy
- Media literacy
- Technology literacy

Life skills include:

- Flexibility
- Leadership
- 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 publised 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 available at its website.

3. SCHEME OF STUDIES

3.1 Subjects to be offered:

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

	Subjects		Names of the subjects	Group
	Compulsory Subject 1		Language I (Hindi -Course A or Hindi -Course B or English Language and Literature)	Group-L
		Subject 2	Language II (Any one from the Group of Languages (Group-L) other than the Language chosen as Subject 1)	Group-L
		Subject 3	Mathematics - Basic or Mathematics Standard	Group- A1
		Subject 4	Science	
		Subject 5	Social Science	
	Optional	Subject 6	Skill subject	Group-S
		Subject 7	Language III /Any subject other than opted above	Group- L/Group- A2
	Subjects of	Subject 8 and 9	Art Education	
	Internal Assessment	Assessment and certification at school level	Health & Physical Education Work Experience*	

^{*}Work experience is subsumed in Health and Physical Education



- (a) 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.
- (b) 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.
- (c) 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.
- (d) It is expected that all the students would 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, students with disabilities are exempted from the study of third language.
- (e) 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).

- (f) Students offering additional sixth skill subject may also offer an additional language III/ any subject as seventh subject.
- (g) 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.
- (h) For Skill subjects, only those subjects can be offered for which permission has been given by the Department of Skill Education, CBSE.
- (i) 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:

https://www.cbse.gov.in/cbsenew/Examination_Circular/2019/5_CIRCULAR.pdf
Schools and candidates may also refer to the circulars issued by the
Board from time to time on this matter.

(j) 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.



3.2 List of subjects offered at Secondary Level:

	LANGUAGE (GROUP-L)						
S	CODE	NAME		Theory Marks	Time (h)	Internal Marks	Total 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.		80	03	020	100
3	003	URDU COURSE-A	(ANY ONE)	80	03	020	100
	303	URDU COURSE-B		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	MARATHI			020	100
10	010	GUJARATI	GUJARATI			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	ASSAMESE		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	092	BODO		80	03	020	100
26	093	TANGKHUL		80	03	020	100
27	094	JAPANESE		80	03	020	100
28	095	BHUTIA		80	03	020	100
29	096	SPANISH		80	03	020	100
30	097	KASHMIRI		80	03	020	100
31	098	MIZO		80	03	020	100



32	099	BAHASA MELAYU	80	03	020	100
33	122	SANSKRIT	80	03	020	100
34	131	RAI	80	03	020	100
35	132	GURUNG	80	03	020	100
36	133	TAMANG	80	03	020	100
37	134	SHERPA	80	03	020	100
38	136	THAI	80	03	020	100

	COMPULSORY SUBJECTS (GROUP-A1)						
S	CODE	NAME		Theory Marks	Time (h)	Internal Marks	Total Marks
1	041	MATHEMATICS -STANDARD	(ANY	80	03	020	100
	241	MATHEMATICS - BASIC	HEMATICS - BASIC ONE)		03	020	100
2	086	SCIENCE		80	03	020	100
3	087	SOCIAL SCIENCE		80	03	020	100

	OTHER SUBJECTS (GROUP- A2)								
S	CODE	NAME		Theory Marks	Time (h)	Internal Marks	Prac- tical	Proj- ect	Total Marks
1	031	CARNATIC MUSIC (VOCAL)	(ANY ONE)	30	02	020	50		100
	032	CARNATIC MUSIC (MELODIC INSTRU- MENTS)		30	02	020	50		100
	033	CARNATIC MUSIC (PERCUSSION IN- STRUMENTS)		30	02	020	50		100
	034	HINDUSTANI MUSIC (VOCAL)		30	02	020	50		100
	035	HINDUSTANI MUSIC (MELODIC INSTRU- MENTS)		30	02	020	50		100
	036	HINDUSTANI MUSIC (PERCUSSION IN- STRUMENTS)		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 CO (NCC)	ORPS	70	03	30			100
5	165*	COMPUTER APPLICA	TIONS	50	02		50		100
6	154	ELEMENTS OF BUSI	NESS	70	03		30		100
7	254	ELEMENTS OF BOOK- ING & ACCOUNTANCY		70	03			30	100



SKILL SUBJECTS (GROUP-S)

S	Code	Name	Job Roles	Marks Distri	bution
No				Theory	Practical
1	401	Retailing	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)		50	50

^{*}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: http://cbseacademic.nic.in/skill-education.html.

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

S.	COURSE NAME	Duration in	MARKS DISTR	IBUTION
No.		Hours	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

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 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.



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 dated 11/10/2018 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 will have more questions based on real-life situations requiring students to apply, analyse, evaluate and synthesize information as per the stipulated outcomes. The corecompetencies 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:

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:-

- (a) Minor variations in proportion of candidates to adjust ties will be made.
- (b) 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.
- (c) Method of grading will be used in subjects where the number of candidates who have passed is more than 500.
- (d) 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			
41-50	C2			
33-40	D			
32 and below	*Essential Repeat			



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):

Multiple assessment strategies relevant to particular learning outcomes are advised over the period of curriculum transaction. The subject teachers would determine the type and frequency of these. This would make assessment more comprehensive and provide schools/teachers flexibility to use multiple and diverse techniques to assess learners viz. 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 observed that recording of such assessment is not cumbersome and can be easily translated into individual student scores. Thus, developing simple scoring criteria and rubrics becomes of equal importance when deciding to use a particular technique. In tune with purpose of periodic assessment, i.e., to provide feedback to improve teaching and learning, it becomes of equal importance to use follow-up measures incase students are found deficient in proficiency of relevant learning outcomes.

4.2.3 Portfolio (05 marks):

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.

What is a portfolio?

A portfolio is a collection of chosen work by a student representing a selection of performances that is collected over time and describes the learner's efforts, progress, and achievement in key areas. 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. Assessment would include self and



peer assessment among others. Its use is recommended as a support to the new instructional approaches that emphasize student's role in constructing knowledge and understanding.

For a more simple approach, it is suggested that the portfolio take the form of a journal or notebook that would include besides classwork, students artifacts selected within a coherent framework 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. Now Schools are expected to develop the portfolios as per para 4.2.2 (a) above.

This portfolio can be seen both as a process and as a product:

- a. As a product, it holds the performance records and documents, a student has produced during the learning course and represents a collection of their learning achievements.
- b. As a process, it enables learners to monitor their own learning systematically, reflect on their performance, redirect their efforts and set future goals.

What purposes does a portfolio serve? A portfolio

- offers the possibility of assessing more complex and important aspects of a learning areas or subject matter that can't be assessed through traditional forms of testing;
- provides a profile of learner's abilities in-depth growth and progress
- helps to develop among students an awareness of their own learning. The focus on self-assessment and reflection helps students to identify their strengths and weaknesses thereby facilitating setting up of realistic improvement 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 not only in their learning in school but beyond as well;

 provides an opportunity to share own learning with peers and review and give feedback on each other's work. Peer Assessment thus becomes a great support that further facilitates a clear understanding and evaluation of personal goals;

How to prepare a portfolio?

It is suggested that the portfolios would include classwork and homework assignments that would help evaluate learner's progress. Besides this, portfolio should be a space for student to display his/her exemplary work in the related area. 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.

The sample of creative work and evidences that demonstrate process skills or development of critical thinking or problem solving merit inclusion as well. A periodic review of the evidences includes in the portfolio would facilitate self-assessment by learners who would be more aware of their own learning and be able to identify their strengths and weaknesses. The portfolio also provides an opportunity to learners to share and comment on each other's work. Such peer assessment facilitate understanding of criteria of good work to students. It is advised that such criteria be developed and made clear to students. Initially this self and peer assessment would be a guided endeavor.

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 are some elements to judge student's portfolio:

- Organization Neatness, Creativity and Visual Appeal
- Completion of guided work focused on specific curricular objectives
- Evidences of student's growth
- Inclusion of all relevant work (Completeness)

Teachers can include other subject relevant criteria and elements to assess portfolios.

A Word of Caution: Portfolios need to be developed in an easy to manage form. They need to be meaningful but simple and accessible. Developing them should not be a burden on students- both in terms of cost and time.

4.2.4 Subject Enrichment Activities (05 marks):

Subject enrichment activities aligned with the secondary school curriculum aim at enrichment of the understanding and skill development. 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. These activities become an important instrument to learn the processes by which knowledge is generated in a particular discipline. They ought to provide opportunity to students to explore their own interests as well along with an understanding of the nature of particular discipline.

It is important that the Subject Enrichment Activities be conducted with rigour and focus. Some suggestions for this 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 the investigatory spirit in congruence to the aims and 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.

The discipline of **Social Science** puts the responsibility on concerned teachers to facilitate students to design and execute relevant projects. It is suggested that social science being the subject relevant to social context, projects be related to Art and culture and include development of Life Skills too. Art is not only about self - expression but is more about perceptions and a special way of understanding and responding to work. Exploring into ideas and meanings through the works of artists/experts/ writers/poets, the students would develop imagination and critical awareness.

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. 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 organized and conducted throughout the year form the basis of assessing the student by the Visual Art/Performing Art teacher.

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

Health and Physical Education 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 of curriculum is on helping children develop a positive attitude and commitment to life long, healthy and active living and the capacity to live satisfying, productive lives with the help of health, hygiene and sanitation, work experience, indigenous sports, yoga, NCC, self-defense, 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 as they develop physical fitness, discipline, sportsmanship combined with patriotism, self-sacrifice and health care. Similarly Self-defense may be actively taught to students, especially girl students, as it instills 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.

To address the Health aspect of HPE, qualified doctors should examine children once in a year along with a follow-up session during the year. School should also bring any noticeable disability in a student to the notice of the school counselor 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	Overall fitness	Participation, team- spirit,
Education including Work Experience		commitment and honest effort.
Art Education	Expression,	Participation, Creative process,
	creativity and	material use, appreciation,
	Aesthetic appeal	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
Е	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	90 periods	While filling online
Athletics/ Swimming Team		data, following grades
Games		may be filled against
Individual Games/ Activity		HPE:
Adventure Sports		Class IX-X: Grade (A-E) on 5-point scale (A, B,
2. Health and Fitness	50 periods	C, D, E)
3. SEWA	50 periods	Grades of SEWA is considered against Work Experience Class IX-X: Grade (A-E) on 5-point scale (A, B, C, D, E)
4. Health and Activity Card	10 periods	
Total	200 Periods	

^{*} Refer the detailed HPE guidelines available on www.cbseacademic.nic.in, 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	Thinking Skills: Creative, Analytical, Evaluative
2	Reading Week	Communication Skills
3	Fastest Reading Contest	Linguistic Skills
4	Aryabhata Ganit Challenge	Reasoning Abilities Problem Solving Skills Critical thinking Analytical thinking Ability to manipulate precise and intricate ideas Ability to construct logical arguments
5	CBSE Heritage India Quiz	Values of respect for diversity and tolerance Awareness about preserving Indian heritage and monuments Critical thinking skills Appreciation for rich heritage and diversity of the country
6	Science Exhibition	Critical and Creative Thinking Skills Problem Solving Skills
7	Science Literacy Promotion Test	Scientific Temperament Connecting Science to day to day life
8	Expression Series	Creative Thinking Skills Communication Skills
9 10	Eco-Club Activities Swachhata Abhiyan	Awareness about Environmental Conservation and Protection Clean lines Habits



11	Ek Bharat Shrestha Bharat	Spirit of Patriotism and Unity Creative Skills
12	Rashtriya Ekta Diwas	
13	Inter School Band Competition	
14	Fit India School Week	Healthy lifestyle
15	CBSE Inter-School Sports & Games Competitions	
16	International Day of Yoga	
17	Matri bhasha Diwas	Awareness of Linguistic and Cultural traditions, Values 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

Teachers should encourage participation of each child in some activity or the others. They must ensure that no child is left out from participation in activities organized by the Board or at the class/school or at interschool level. By carefully examining the behavior / skills / competencies of children in the class on all possible occasions, teachers will maintain records of



the performance of learners. Schools should encourage teachers to work collaboratively with other teachers for facilitating and assessing learner's performance and then finally assigning grades.

4.8 Discipline (Attendance, Sincerity, Behavior, Values)

Discipline significantly impacts career shaping and helps build character, sincerity, self- control, perseverance, good behavior and values. The concept of discipline should not be confused with strict authoritarian environment and the students should be given freedom to share their doubts and ideas with teachers regarding class work. 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 behavior 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 behavior of the students. Values Education Resource Book and Kit developed by CBSE may be used for inculcating values in students.

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.





CENTRAL BOARD OF SECONDARY EDUCATION

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

English Language & Literature

Code No. 184

Class IX (2021-22)

Term wise Syllabus

Term - I

Reading-

Question based on the following kinds of unseen passages to assess inference, evaluation, vocabulary, analysis and interpretation:

- 1. Discursive passage (400-450 words)
- 2. Case based Factual passage (with visual input/ statistical data/ chart etc. 200-250 words)

Writing-

- 1. Descriptive paragraph (Person)
- 2. Short Story (based on beginning line, outline, cues etc.)

Grammar

- 1. Tenses
- 2. Subject-Verb Concord
- 3. Modals
- 4. Determiners
- 5. Reported Speech
- 6. Commands and Requests
- 7. Statements
- 8. Questions

Literature

Questions based on extracts / texts to assess interpretation, inference, extrapolation beyond the text and across the texts.

<u>Moments</u>

- 1. The Lost Child
- 2. The Adventures of Toto
- 3. In the Kingdom of Fools
- 4. The Happy Prince

Beehive

Prose

- 1. The Fun They Had
- 2. The Sound of Music
- 3. The Little Girl
- 4. A Truly Beautiful Mind
- 5. My Childhood

Poems-

- 1. The Road Not Taken
- 2. Wind
- 3. Rain on The Roof
- 4. A Legend of The Northland

Term - II

Reading-

Question based on the following kinds of unseen passages to assess inference, evaluation, vocabulary, analysis and interpretation:

- 1. Discursive passage (400-450 words)
- 2. Case based Factual passage (with visual input/ statistical data/ chart etc. 200-250 words)

Writing-

- 1. Descriptive Paragraph (Diary)
- 2. Story writing (based on beginning line, outline, cues etc.)

Grammar

- 1. Tenses
- 2. Subject-Verb Concord
- 3. Modals
- 4. Determiners
- 5. Reported Speech
- 6. Commands and Requests
- 7. Statements
- 8. Questions

Literature

Questions based on extracts / texts to assess interpretation, inference, extrapolation beyond the text and across the texts.

Moments

- 1. Weathering the Storm in Ersama
- 2. The Last Leaf
- 3. A House is not a Home
- 4. The Beggar

Beehive

Prose

- 1. Packing
- 2. Reach for The Top
- 3. The Bond of Love
- 4. If I were You

Poems Poems

- 1. No Men Are Foreign
- 2. On killing a Tree
- 3. The Snake Trying

Each Term

SECTION	WEIGHTAGE (IN MARKS)
READING	10
WRITING & GRAMMAR	10
LITERATURE	20
TOTAL	40
INTERNAL ASSESSMENT	10
GRAND TOTAL	50

English Language and Literature Code No. 184 Class X (2021-22) Term wise Syllabus

Term - I

READING

Question based on the following kinds of unseen passages to assess inference, evaluation, vocabulary, analysis and interpretation:

- 1. Discursive passage (400-450 words)
- 2. Case based Factual passage (with visual input/ statistical data/ chart etc. 300-350 words)

WRITING SKILL

- Formal letter based on a given situation.
 - Letter to the Editor
 - Letter of Complaint (Official)
 - Letter of Complaint (Business)

GRAMMAR

- 1. Tenses
- 2. Modals
- 3. Subject-Verb Concord
- 4. Determiner
- 5. Reported Speech
- 6. Commands and Requests
- 7. Statements
- 8. Questions

LITERATURE

Questions based on extracts / texts to assess interpretation, inference, extrapolation beyond the text and across the texts.

FIRST FLIGHT

- 1. A Letter to God
- 2. Nelson Mandela
- 3. Two Stories About Flying
- 4. From the Diary of Anne Frank
- 5. The Hundred Dresses 1
- 6. The Hundred Dresses 2

POEMS

- 1. Dust of Snow
- 2. Fire and Ice
- 3. A Tiger in the Zoo
- 4. The Ball Poem

FOOTPRINTS WITHOUT FEET

- 1. A Triumph of Surgery
- 2. The Thief's Story
- 3. Footprints Without Feet

Term - II

READING

Question based on the following kinds of unseen passages to assess inference, evaluation, vocabulary, analysis and interpretation:

- 1. Discursive passage (400-450 words)
- Case based Factual passage (with visual input/ statistical data/ chart etc. 300-350 words)

WRITING SKILL

- 1. Formal letter based on a given situation
 - Letter of Order
 - Letter of Enquiry
- 2. Analytical Paragraph (based on outline/chart/cue/map/report etc.)

GRAMMAR

- 1. Tenses
- 2. Modals
- 3. Subject Verb Concord
- 4. Determiner
- 5. Reported Speech
- 6. Commands and Requests
- 7. Statements
- 8. Questions

LITERATURE

Questions based on extracts / texts to assess interpretation, inference, extrapolation beyond the text and across the texts.

FIRST FLIGHT

- 1. Glimpses of India
- 2. Madam Rides the Bus
- 3. The Sermon at Benares
- 4. The Proposal (Play)

POEMS

- 1. Amanda
- 2. Animals
- 3. The Tale of Custard the Dragon

FOOTPRINTS WITHOUT FEET

- 1. The Making of a Scientist
- 2. The Necklace
- 3. The Hack Driver
- 4. Bholi

Each Semester

SECTION	WEIGHTAGE (IN MARKS)
READING	10
WRITING & GRAMMAR	10
LITERATURE	20
TOTAL	40
INTERNAL ASSESSMENT	10
GRAND TOTAL	50

हिंदी मातृभाषा (कोड 002) कक्षा 9वीं-10वीं (2021-22)

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, अखबारी समझ, शब्द शिक्तयों कीसमझ, 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 आसप्रोस, राज्य-देश की सीमा को लांघते हुए वैश्विक क्षितिज तक फैल जाती है। इन बच्चों की दुनिया में समाचार, खेल, फिल्म 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 होगा 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 रूचि और आवश्यकता के अनुरूप हिंदी की पढ़ाई कर सकेंगे तथा हिंदीमें बोलने और लिखने में सक्षम हो सकेंगे।
- (ख) अपनी भाषा दक्षता के चलते उच्चतर माध्यमिक स्तर पर विज्ञान, समाज विज्ञान और अन्य पाठ्यक्रमों के साथ सहज संबद्धता (अंतर्सबंध) स्थापित कर सकेंगे।
- (ग) दैनिक जीवन व्यवहार के विविध क्षेत्रों में हिन्दी 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।
- (इ.) हिंदी भाषा में दक्षता का इस्तेमाल वे अन्य भाषा-संरचनाओं की समझ विकसित करने के लिए करसकेंगे।

कक्षा 9वीं व 10वीं में मातृभाषा के रूप में हिंदी-शिक्षण के उद्देश्य :

- 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, लिंग एवं भाषा) के प्रति सकारात्मक और संवेदनशील रवैये का विकास।
- जाति, धर्म, लिंग, राष्ट्रीयता, क्षेत्र आदि से संबंधित पूर्वाग्रहों के चलते बनी रूढ़ियों की भाषिक अभिव्यक्तियों के प्रति सजगता।
- भारतीय भाषाओं एवं विदेशी भाषाओं की संस्कृतिकविविधता 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 अवगतकराना और नवीन भाषा प्रयोग करने कीक्षमता से परिचय।
- विश्लेषण और तर्क क्षमता का विकास।
- भावभिव्यक्ति 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 बह्भाषिक प्रकृति की समझ का विकासकरना।

शिक्षण युक्तियाँ

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

- विद्यार्थी द्वारा की जा रही गलतियों 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 तनावग्रस्त माहौल में पड़ जाएँ। उन्हें भाषा के सहज, कारगर और रचनात्मक रूपों से इस तरह परिचित कराना उचित है कि वे स्वयं सहजरूप से भाषा का मृजन कर सकें।
- विद्यार्थी स्वतंत्र और अबाध रूप से लिखित और मौखिक अभिव्यक्ति करे। अधिगम बाधित होने पर अध्यापक, अध्यापन शैली में परिवर्तन करें।
- ऐसे शिक्षण-बिंदुओं की पहचान की जाए जिससे कक्षा में विद्यार्थी निरंतर सिक्रय भागीदारी करें और अध्यापक भी इस प्रकिया में उनका साथी बने।
- हर भाषा का अपना व्याकरण होता है। भाषा की इस प्रकृति की पहचान कराने में परिवेशगत और पाठगत संदर्भों का ही प्रयोग करना चाहिए। यह पूरी प्रक्रिया ऐसी होनी चाहिए कि विद्यार्थी स्वयं को शोधकर्ता समझे तथा अध्यापक इसमें केवल निर्देशन करें।
- हिंदी में क्षेत्रीय प्रयोगों, अन्य भाषाओं के प्रयोगों के उदाहरण से यह बात स्पष्ट की जा सकती है
 कि भाषा अलगाव में नहीं बनती 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 जरूरी 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.) मानव संसाधन विकास मंत्रालय के विभिन्न संगठनों तथा स्वतंत्र निर्माताओं द्वारा उपलब्ध कराए गए कार्यक्रम/ ई-सामग्री वृत्तचित्रों और फीचर फिल्मों को शिक्षण-सामग्री के तौर पर इस्तेमाल करने की जरूरत है। इनके प्रदर्शन के क्रम में इन पर लगातार बातचीत के जरिए 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 सिर्फ 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 का सुनकर अर्थ ग्रहण करना, 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 शिष्टाचारानुकूल प्रकार से स्नना 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 10 अंक (5+5)

श्रवण (सुन्न) (5 अंक): वर्णित या पठित सामग्री को सुनकर अर्थग्रहण करना, वार्तालाप करना, वाद-विवाद, भाषण, कवितापाठ आदि को सुनकर समझना, मूल्यकान करना और अभिव्यक्ति के ढंग को समझना।

वाचन (बोल्न) (5 अंक): भाषण, सस्वर कविता-पाठ, वार्तालाप और उसकी औपचारिकता, कार्यक्रम-प्रस्तुति, कथा-कहानी अथवा घटना सुनना, परिचय देना, भावानुकूल संवाद-वाचन।

टिप्पणी: वार्तालाप की दक्षताओं का मूल्यांकन निरंतरता के आधार पर परीक्षा के समय ही होगा। निर्धारित 10 अंको में से श्रवण (सुनना) कौशल के मूल्यांकन के लिए और 5 वाचन (बोलना) कौशल के मूल्यांकन के लिए होंगे।

 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 /घटना पूर्ण एवं स्पष्ट होनी चाहिए। वाचक का उच्चारण शुद्ध, स्पष्ट एवं विराम चिहनों के उचित प्रयोग सहित होना चाहिए।

 परीक्षार्थी ध्यान पूर्वक परीक्षा/आडियो क्लिप को सुनने के पश्चात परीक्षक द्वारा पूछे गए प्रश्नों का अपनी समझ से मौखिक उत्तर देंगे।

कौशलों के मूल्यांकनका आधार

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

टिप्पणी

- परीक्षण से पूर्व परीक्षार्थी को तैयारी के लिए क्छ समय दिया जाए।
- विवरणात्मक भाषा में वर्तमान काल 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।
- जब परीक्षार्थी बोलना प्रारंभ करें तो परीक्षक कम से कम हस्तक्षेप करें।

पठन कौशल

- सरसरी दृष्टि से पढ़कर पाठ का केंद्रीय विचार ग्रहण करना।
- एकाग्रचित हो एक अभीष्ट गति के साथ मौन पठन करना।
- पठित सामग्री पर अपनी प्रतिक्रिया व्यक्त करना।
- भाषा, विचार एवं शैली की सराहना करना।
- साहित्य के प्रति अभिरूचि 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।
- सिक्रय (व्यवहारोपयोगी) शब्द भंडार की वृद्धि करना।
- पठित सामग्री के विभिन्न अंशों का परस्पर संबंध समझना।
- पठित अन्च्छेदों के शीर्षक एवं उपशीर्षक देना।
- कविता के प्रमुख उपादान यथा त्क, लय, यित,गित, बलाघातआदि 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।
- उपय्क्त अन्च्छेदों 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 ह्ई घटनाओं का वर्णन करना और उन पर अपनी प्रतिक्रिया देना।
- हिन्दी 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।
- स्वान्भूत विचारों और भावनाओं को स्पष्ट सहज और प्रभावशाली ढंग से अभिव्यक्त करना।
- क्रमबद्धता और प्रकरण की एकता बनाए रखना।
- लिखने में मौलिकता और सृजनात्मकता लाना।

रचनात्मक अभिव्यक्ति

अनुच्छेद लेखन

- पूर्णता संबंधित विषय के सभी पक्षों को अन्च्छेद के सीमित आकार में संयोजित करना
- क्रमबद्धता विचारों को क्रमबद्ध एवं तर्कसंगत विधि से प्रकट करना
- विषय-केन्द्रित प्रारंभ से अंत तक अन्च्छेद का एक सूत्र में बंधा होना
- समासिकता सीमित शब्दों में यथासंभव पूरी बात कहने का प्रयास, अनावश्यक बातें न करके केवल विषय संबद्ध वर्णन-विवेचन

पत्र लेखन

- अनौपचारिक पत्र विचार-विमर्श का जरिया जिनमें मैत्रीपूर्ण भावना निहित, सरलता, संक्षिप्त और सादगी के साथ लेखन शैली
- औपचारिक पत्रों द्वारा दैनंदिनी 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 भाषाशैली, उपयुक्त, सटीक शब्दों के प्रयोग, सीध-सादे ढंग से स्पष्ट और प्रत्यक्ष बात की प्रस्तुति
- प्रारूप की आवश्यक औपचारिकताओं के साथ सुस्पष्ट, सुलझे और क्रमबद्ध विचार आवश्यक तथ्य, संक्षेप और सम्पूर्णता के साथ प्रभावान्विति

विज्ञापन लेखन

विज्ञापित वस्तु / विषय को केंद्र में रखते ह्ए

- विज्ञापित वस्त् के विशिष्ट गुणों का उल्लेख
- आकर्षक लेखन शैली
- प्रस्त्ति में नयापन, वर्तमान से ज्ड़ाव तथा दूसरों से भिन्नता
- विज्ञापन में आवश्यकतान्सार नारे (स्लोगन) का उपयोग
- (विज्ञापन लेखन मे बॉक्स, चित्र अथवा रंग का उपयोग अनिवार्य नहीं)

संवाद लेखन

दो या दो से अधिक लोगों के बीच होने वाले वार्तालाप/ बातचीत विषय, काल्पनिक या किसी वार्ता को सुनकर यथार्थ पर आधारित संवाद लेखन की रचनात्मक शक्ति का विकास, कहानी, नाटक, फिल्म और टीवी सीरियल से लें।

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

लघु-कथा लेखन

निरंतरता

- कथात्मकता
- प्रभावी संवाद/ पात्रानुकुल संवाद
- रचनात्मकता/कल्पना शक्ति का उपयोग
- जिज्ञासा/रोचकता

संदेश लेखन (शुभकामना, पर्व-त्यौहारोंएवं विशेष अवसरों पर दिए जाने वाले संदेश)

- विषय से संबद्धता
- संक्षिप्त और सारगर्भित
- भाषाई दक्षता एवं प्रस्तुति
- रचनात्मकता/सृजनात्मकता

हिंदी पाठ्यक्रम - अ (कोड सं. - 002) कक्षा 9वीं हिन्दी अ -परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2021-22

		परीक्षा भार विभाजन प्रथम सत्र		
		विषयवस्तु	उप भार	कुलभार
1	निम्नि	नेखित से चिंतन क्षमता एवं अभिव्यक्ति कौशल पर आधारित बह्विकल्पी प्रश्न।		10
	एक अ	निठत गद्यांश 150 से 200 शब्दों का (1x5=5) विकल्प सहित	5	
	एक अ	पठित काव्यांश 150 से 200 शब्दों का (1x5=5) विकल्प सहित	5	7
2	व्याकर	ग के लिए निर्धारित विषयों पर विषय-वस्तु का बोध, भाषिक बिंदु /संरचना आदि पर		
	बीस में	ं से सोलह बहुविकल्पी प्रश्नों का उत्तर देना होगा (1x16)		
	1	शब्द निर्माण- उपसर्ग - 2 अंक, प्रत्यय - 2 अंक, समास - 4 अंक	8	16
	2	अर्थ की दृष्टि से वाक्य भेद 4 अंक	4	
	3	अलंकार - (शब्दालंकार: अनुप्रास, यमक, श्लेष) (अर्थालंकार : उपमा, रूपक, उत्प्रेक्षा,	4	
		अतिशयोक्ति, मानवीकरण)		
3	पाठ्यपु	स्तक क्षितिज भाग - 2		
	अ	गद्य खंड	7	
	1	क्षितिज से निर्धारित पाठों में से गद्यांश के आधार पर विषय-वस्तु का ज्ञान बोध,	5	
		अभिव्यक्ति आदि पर पाँच बहुविकल्पी प्रश्न पूछे जाएंगे। (1x5)		
	2	क्षितिज से निर्धारित गद्य पाठों के आधार पर विद्यार्थियों की उच्च चिंतन क्षमताओं	2	
		एवं अभिव्यक्ति का आकलन करने हेतु दो बहुविकल्पीय प्रश्न पूछे जाएंगे। (1x2)		14
	ब	काव्य खंड	7	
	1	क्षितिज से निर्धारित कविताओं में से काव्यांश के आधार पर पाँच बहुविकल्पीय	5	
		प्रश्न पूछे जाएंगे (1x5)		
	2	क्षितिज से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्य बोध परखने	2	
		हेतु दो बहुविकल्पीय प्रश्न पूछे जाएंगे। (1x2)		
		आंतरिक मूल्याङ्कन		10
	अ	सामयिक आकलन	2.5	
	ब	बहुविध आकलन	2.5	
	स	पोर्टफोलियो	2.5	
	द	श्रवण एवं वाचन	2.5	
		कुल		50

सत्र-1 2021-22 में निम्नलिखित पाठ सम्मिलित किए गए हैं – पाठ्यपुस्तक क्षितिज भाग -1

	• 5
गद्य - खंड	काव्य - खंड
प्रेमचंद - दो बैलों की कथा	कबीर - साखियाँ और सबद (पद) 1 (मोकों कहाँ ढूँढे बंदे)
राहुल सांकृत्यायन - ल्हासा की ओर	ललद्यद - वाख
	रसखान – सवैये

	हिंदी पाठ्यक्रम - अ (कोड सं 002) कक्षा 9वीं हिन्दी अ परीक्षा भार विभाजन सत्र 2			
विषयवस्तु उप भार कुल				
1	पाट्		20	
	अ	गद्य खंड		
		तिज से निर्धारित पाठों के आधार पर विषय-वस्तु का ज्ञान बोध, अभिव्यक्ति आदि पर प्रश्न पूछे जाएंगे। (2x4)	8	
	ब	काव्य खंड		
		तिज से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्य बोध परखने हेतु तीन न पूछे जाएंगे। (2x3)	6	
	स	पूरक पाठ्यपुस्तक कृतिका भाग - 1		
	कृति	तेका के निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएंगे । (3x2)	6	
2	लेख	ान		20
	31	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 विषयों में से किन्हीं तीन विषयों में से किसी एक विषय पर लगभग 150 शब्दों में अनुच्छेद। (5x1)	5	
	ब	अभिट्यक्ति की क्षमता पर केन्द्रित औपचारिक तथा अनौपचारिक विषयों में 120 शब्दों में से किसी एक विषय पर पत्र। (5x1)	5	
	स	किन्ही दो स्थितियों पर लगभग 40 शब्दों के दो संवाद लेखन (2.5 अंक x2 प्रश्न) (विकल्प सहित)	5	
	द	लघु-कथा लेखन लगभग 120 शब्दों में (विकल्प सहित)	5	
3	आं	तरिक मूल्याङ्कन		10
	अ	सामयिक आकलन	2.5	
	ब	बहुविध आकलन	2.5	
	स	पोर्टफोलियो	2.5	

	द	श्रवण एवं वाचन	2.5	
कु	ल			50

निर्धारित पुस्तकं :

- 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

सत्र-2 2021-22 में निम्नलिखित पाठ सम्मिलित किए गए हैं -

पाठ्यपुस्तक क्षितिज भाग -1

गद्य – खंड

- 1. जाबिर ह्सैन साँवले सपनों की याद
- 2. हरिशंकर परसाई प्रेमचंद के फटे जूते

काव्य - खंड

- 3. माखनलाल चतुर्वेदी कैदी और कोकिला
- 4. राजेश जोशी बच्चे काम पर जा रहे हैं

अनुपूरक पाठ्यपुस्तक कृतिका भाग -1

सत्र -2 2021-22 में निम्नलिखित पाठ सम्मिलित किए गए हैं –

- 1. मृदुला गर्ग मेरे संग की औरतें
- 2. विद्यासागर नौटियाल माटी वाली
- 3. जगदीश चंद्र माथुर रीढ़ की हड्डी

हिंदी पाठ्यक्रम -अ (कोड सं. 002) कक्षा 10वीं हिंदी - अ परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2021-22

		परीक्षा भार विभाजन सत्र 1		
		विषयवस्तु	उप भार	कुलभार
1	अर्पा	अपठित गदयांश व कावयांश पर चिंतन क्षमता एवं अभिव्यक्ति कौशल पर आधारित		10
	बहुविकल्पी प्रश्न।			
	3T	एक अपठित गदयांश 150 से 200 शब्दों का (1x5=5) विकल्प सहित	5	
	ब	एक अपठित काव्यांश 150 से 200 शब्दों का (1x5=5) विकल्प सहित	5	
2		नरण के लिए निर्धारित विषयों पर विषय-वस्तु का बोध, भाषिक बिंदु /संरचना आदि पर	J	16
		प्रश्न (1x16) कुल 20 प्रश्न पूछे जाएँगे जिसमें से केवल 16 प्रश्नों के उत्तर देने हों		_
	1	रचना के आधार पर वाक्य भेद (4 अंक)	4	_
	2	वाच्य (4 अंक)	4	
	3	पद परिचय (4 अंक)	4	
	4	रस (4 अंक)	4	
3	पाठ्	यपुस्तक क्षितिज भाग - 2		_
	अ	गद्य खंड	7	
	1	क्षितिज से निर्धारित पाठों में से गदयांश के आधार पर विषय-वस्तु का ज्ञान बोध,	5	
		अभिव्यक्ति आदि पर पाँच बहुविकल्पी प्रश्न पूछे जाएँगे। (1x5)		
	2	क्षितिज से निर्धारित गद्य पाठों के आधार पर विद्यार्थियों की उच्च चिंतन क्षमताओं	2	14
		एवं अभिव्यक्ति का आकलन करने हेतु दो बहुविकल्पी प्रश्न पूछे जाएँगे। (1x2)		14
	ब	काव्य खंड	7	
	1	क्षितिज से निर्धारित कविताओं में से काव्यांश के आधार पर पाँच बह्विकल्पी प्रश्न	5	
		पूछे जाएँगे (1x5)		
	2	क्षितिज से निर्धारित कवितावों के आधार पर विद्यार्थियों का काव्यबोध परखने हेतु	2	
		दो बह्विकल्पी प्रश्न पूछे जाएँगे। (1x2)		
4		आंतरिक मूल्याङ्कन		10
	3Ŧ	सामयिक आकलन	2.5	
	ब	बहुविध आकलन	2.5	
	स	पोर्टफोलियो	2.5	
	द	श्रवण एवं वाचन	2.5	
		कुल		50

पाठ्यपुस्तक क्षितिज भाग -2 सत्र 2021-22 सत्र -1 में निम्नलिखित पाठ सम्मिलित किए गए हैं –

गद्य - खंड	काट्य - खंड
स्वयं प्रकाश - नेताजी का चश्मा	सूरदास - पद
रामवृक्ष बेनीपुरी - बालगोबिन भगत	तुलसीदास - राम - लक्ष्मण - परशुराम संवाद

		परीक्षा भार विभाजन सत्र 2		
		विषयवस्तु	उप भार	कुलभार
1	पाठ्य	पुस्तक क्षितिज भाग - 2 व पूरक पाठ्यपुस्तक कृतिका भाग - 2		
	अ	गद्य खंड		
		क्षितिज से निर्धारित पाठों के आधार पर विषय-वस्तु का ज्ञान बोध, अभिव्यक्ति	8	20
		आदि पर चार प्रश्न पूछे जाएंगे। (2x4)		
	ब	काट्य खंड		
		क्षितिज से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध परखने	6	
		हेतु तीन प्रश्न पूछे जाएँगे। (2x3)		
	स	पूरक पाठ्यपुस्तक कृतिका भाग - 2		7
		कृतिका के निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे । (3x2)	6	
2	लेखन			20
	31	विभिन्न विषयों और संदर्भों पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की	5	7
		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		
		150 शब्दों में अनुच्छेद लेखन। (5x1)		
	ब	अभिव्यक्ति की क्षमता पर केन्द्रित औपचारिक अथवा अनौपचारिक विषयों में से	5	1
		किसी एक विषय पर लगभग 120 शब्दों में पत्र। (5x1)		
	स	विषय से संबंधित दो विज्ञापनों (प्रत्येक लगभग 50 शब्दों वाला)का लेखन। (2.5 अंक x2	5	1
		प्रश्न) (विकल्प सहित)		
	द	संदेश लेखन (शुभकामना, पर्व-त्योहारों एवं विशेष अवसरों पर दिए जाने वाले दो संदेश)	5	
		(प्रत्येक लगभग 40 शब्दों में) (2.5 अंक x2 प्रश्न) (विकल्प सहित)		
3		आंतरिक मूल्याङ्कन		10
	31	सामयिक आकलन	2.5	_
	ब	बहुविध आकलन	2.5	_
	स	पोर्टफोलियो	2.5	_
	द	श्रवण एवं वाचन	2.5	
		कुल		50

सत्र-2 2021-22 में निम्नलिखित पाठ सम्मिलित किए गए हैं –

पाठ्यपुस्तक क्षितिज भाग -2

काव्य – खंड

- 1. सूर्यकांत त्रिपाठी 'निराला' 'उत्साह', 'अट नहीं रही है'
- 2. ऋतुराज कन्यादान

गद्य - खंड

- 3. यशपाल लखनवी अंदाज़
- 4. सर्वेश्वर दयाल सक्सेना मानवीय करुणा की दिव्य चमक अनुपूरक पाठ्यपुस्तक कृतिका भाग -2

- 1. शिवपूजन सहाय माता का अँचल
- 2. कमलेश्वर जॉर्ज पंचम की नाक
- 3. मधु कांकरिया साना साना हाथ जोड़ि

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 प्रकाशितनवीनतम संस्करण

MATHEMATICS (IX-X)

(CODE NO. 041)

Session 2021-22

Term-wise Syllabus

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 (2021-22) FIRST TERM

One Paper

90 Minutes

NO.	UNIT NAME	MARKS
I	NUMBER SYSTEMS	8
II	ALGEBRA	5
III	COORDINATE GEOMETRY	4
IV	GEOMETRY	13
V	MENSURATION	4
VI	STATISTICS & PROBABILITY	6
	Total	40
	INTERNAL ASSESSMENT	10
	TOTAL	50

UNIT- NUMBER SYSTEMS

1. NUMBER SYSTEM

Review of representation of natural numbers, integers, rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers.

- 1. 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
- 2. 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.
- 3. 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-ALGEBRA

2. LINEAR EQUATIONS IN TWO VARIABLES

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. Graph of linear equations in two variables. Examples, problems from real life with algebraic and graphical solutions being done simultaneously

UNIT-COORDINATE GEOMETRY

3. COORDINATE GEOMETRY

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

UNIT-GEOMETRY

4. LINES AND ANGLES

- 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) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines.
- 4. (Motivate) Lines which are parallel to a given line are parallel.
- 5. (Prove) The sum of the angles of a triangle is 180°.
- 6. (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles.

5. TRIANGLES

- 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. (Motivate) 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.
- 7. (Motivate) The sides opposite to equal angles of a triangle are equal.

UNIT-MENSURATION

6. HERON'S FORMULA

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

UNIT-STATISTICS & PROBABILITY

7. STATISTICS

Introduction to Statistics: Collection of data, presentation of data — tabular form, ungrouped / grouped, bar graphs, histograms

INTERNAL ASSESSMENT	MARKS	TOTAL MARKS
Periodic Tests	3	
Multiple Assessments	2	
Portfolio	2	10
Student Enrichment Activities-practical work	3	

SECOND TERM

No.	UNIT NAME	MARKS
I	ALGEBRA(Cont.)	12
II	GEOMETRY(Cont.)	15
III	MENSURATION(Cont.)	9
IV	STATISTICS & PROBABILITY(Cont)	4
	Total	40
	INTERNAL ASSESSMENT	10
	TOTAL	50

UNIT-ALGEBRA

1. POLYNOMIALS

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. 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

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

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

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

and their use in factorization of polynomials.

UNIT-GEOMETRY

2. QUADRILATERALS

- 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.

3. CIRCLES

Through examples, arrive at definition of circle and related concepts-radius, circumference, diameter, chord, arc, secant, sector, segment, subtended angle.

- 1. (Prove) Equal chords of a circle subtend equal angles at the centre and (motivate) its converse.
- 2. (Motivate) The perpendicular from the centre of a circle to a chord bisects the chord and conversely, the line drawn through the centre 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 centre (or their respective centres) and conversely.
- 4. (Motivate) The angle subtended by an arc at the centre 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) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.

4. CONSTRUCTIONS

- 1. Construction of bisectors of line segments and angles of measure 60°, 90°, 45° etc., equilateral triangles.
- 2. Construction of a triangle given its base, sum/difference of the other two sides and one base angle.

UNIT-MENSURATION

5. SURFACE AREAS AND VOLUMES

Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones.

UNIT-STATISTICS & PROBABILITY

6. PROBABILITY

History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept; the experiments to be drawn from real - life situations, and from examples used in the chapter on statistics).

INTERNAL ASSESSMENT	MARKS	TOTAL MARKS
Periodic Tests	3	
Multiple Assessments	2	
Portfolio	2	10 marks for the term
Student Enrichment Activities-practical work	3	

COURSE STRUCTURE CLASS –X (2021-22) FIRST TERM

One Paper

90 Minutes

NO.	UNIT NAME	MARKS
I	NUMBER SYSTEMS	6
II	ALGEBRA	10
III	COORDINATE GEOMETRY	6
IV	GEOMETRY	6
V	TRIGONOMETRY	5
VI	MENSURATION	4
VII	STATISTICS & PROBABILITY	3
	Total	40
	INTERNAL ASSESSMENT	10
	TOTAL	50

INTERNAL ASSESSMENT	MARKS	TOTAL MARKS
Periodic Tests	3	
Multiple Assessments	2	
Portfolio	2	10 marks for the term
Student Enrichment Activities-practical work	3	

UNIT-NUMBER SYSTEMS

1. REAL NUMBER

Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples. Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals.

UNIT-ALGEBRA

2. POLYNOMIALS

Zeroes of a polynomial. Relationship between zeroes and coefficients of quadratic polynomials only.

3. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

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 and by elimination. Simple situational problems. Simple problems on equations reducible to linear equations.

UNIT-COORDINATE GEOMETRY

4. COORDINATE GEOMETRY

LINES (In two-dimensions)

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

UNIT-GEOMETRY

5. TRIANGLES

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.
- 6. (Motivate) If a perpendicular is drawn from the vertex of the right angle of a right triangle to the hypotenuse, the triangles on each side of the perpendicular are similar to the whole triangle and to each other.
- 7. (Motivate) The ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides.
- 8. (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.
- 9. (Motivate) In a triangle, if the square on one side is equal to sum of the squares on the other two sides, the angle opposite to the first side is a right angle.

UNIT-TRIGONOMETRY

6. INTRODUCTION TO TRIGONOMETRY

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined). Values of the trigonometric ratios of 30°, 45° and 60°. Relationships between the ratios.

TRIGONOMETRIC IDENTITIES

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

UNIT-MENSURATION

7. AREAS RELATED TO CIRCLES

Motivate the area of a circle; 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° and 90° only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)

UNIT- STATISTICS & PROBABILITY

8. PROBABILITY

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

SECOND TERM

NO.	UNIT NAME	MARKS
I	ALGEBRA(Cont.)	10
II	GEOMETRY(Cont.)	9
III	TRIGONOMETRY(Cont.)	7
IV	MENSURATION(Cont.)	6
V	STATISTICS & PROBABILITY(Cont.)	8
	Total	40
	INTERNAL ASSESSMENT	10
	TOTAL	50

UNIT-ALGEBRA

1. QUADRATIC EQUATIONS

(10) Periods

Standard form of a quadratic equation ax2 + 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 (problems on equations reducible to quadratic equations are excluded)

2. ARITHMETIC PROGRESSIONS

Motivation for studying Arithmetic Progression Derivation of the nth term and sum of the first n terms of A.P. and their application in solving daily life problems. (Applications based on sum to n terms of an A.P. are excluded)

UNIT- GEOMETRY

3. CIRCLES

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.

4. CONSTRUCTIONS

- 1. Division of a line segment in a given ratio (internally).
- 2. Tangents to a circle from a point outside it.

UNIT-TRIGONOMETRY

5. SOME APPLICATIONS OF TRIGONOMETRY

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

UNIT-MENSURATION

6. SURFACE AREAS AND VOLUMES

- 1. Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones.
- 2. Problems involving converting one type of metallic solid into another and other mixed problems. (Problems with combination of not more than two different solids be taken).

UNIT-STATISTICS & PROBABILITY

7. STATISTICS

Mean, median and mode of grouped data (bimodal situation to be avoided). Mean by Direct Method and Assumed Mean Method only

INTERNAL ASSESSMENT	MARKS	TOTAL MARKS
Periodic Tests	3	
Multiple	2	
Assessments		
Portfolio	2	10 marks for the term
Student Enrichment Activities-practical work	3	

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.

SCIENCE

(Subject Code - 086)

Syllabus for Purpose of Examination 2021-22 CLASS – IX and X (2021-22)

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, hypothesizing, experimenting recording observations, drawing, tabulation, plotting graphs, analyze and drive conclusions 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 the 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. The total Theory Examinations (Term I+II) will be of 80 marks and 20 marks weightage shall be for Internal Assessment (Term I+II).
- 2. Internal Assessment Maximum Marks 10 for each Term:
 - a There will be Periodic Assessment that would include:
 - Three periodic tests will be conducted by the school in the entire session. Average of the
 two periodic tests/marks of best periodic Test conducted in the Term is to be taken for
 consideration.
 - 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, enquiry based scientific investigations etc.
 - b. Subject Enrichment in the form of Practical/Laboratory work should be done throughout the year and the student should maintain record of the same. Practical Assessment should be

continuous. 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.

COURSE STRUCTURE CLASS IX

EVALUATION SCHEME		
	Theory	
Units	Term- I	Marks
I	Matter-Its Nature and Behaviour: Chapter - 2	09
II	Organization in the Living World: Chapter - 5 and 6	18
III	Motion, Force and Work: Chapter - 8 and 9	13
Units	Term - II	Marks
I	Matter-Its Nature and Behaviour: Chapter 3 and 4	18
II	Organization in the Living World: Chapter -13	08
III	Motion, Force and Work: 10 and 11	14
Total Theo	80	
Internal Assessment: Term I		10
Internal Assessment: Term II		10
Grand Total		100

TERM – I

Theme: Materials

Unit I: Matter- It's Nature and Behaviour

Chapter – 2 Is matter around us Pure

Nature of matter: Elements, compounds and mixtures. Heterogeneous and homogenous mixtures, colloids and suspensions.

Theme: The World of the Living

Unit II: Organization in the Living World

<u>Chapter – 5 The Fundamental Unit of Life</u>

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.

<u>Chapter – 6 Tissues</u>

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

Chapter – 8 Motion

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, derivation of equations of motion by graphical method; elementary idea of

uniform circular motion.

Chapter – 9 Force and Laws of 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. Elementary idea of

conservation of Momentum.

TERM - II

Theme: Materials

Unit I: Matter- It's Nature and Behaviour

Chapter – 3 Atoms and Molecules

Particle nature and their basic units: Atoms and molecules, Law of constant proportions, Atomic

and molecular masses. Mole concept: Relationship of mole to mass of the particles and numbers.

Chapter – 4 Structure of Atom

Structure of atoms: Electrons, protons and neutrons, valency, chemical formula of common

compounds. Isotopes and Isobars.

Theme: Moving Things, People and Ideas

Unit III: Motion, Force and Work

Chapter – 10 Gravitation

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

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

Chapter – 11 Work and Energy

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

Law of conservation of energy.

Theme: The World of the Living

Page 3 of 10

Unit II: Organization in the Living World

Chapter – 13 Why do we fall ill

Health and Diseases: Health and its failure. Infectious and Non-infectious diseases, their causes and manifestation. Diseases caused by microbes (Virus, Bacteria and Protozoans) and their prevention; Principles of treatment and prevention. Pulse Polio programmes.

ONLY FOR INTERNAL ASSESSMENT

Note: Learners are assigned to read the below listed part of Unit IV. They can be encouraged to prepare a brief write up on any one concept of this Unit in their Portfolio. This may be an assessment for Internal Assessment and credit may be given (Periodic assessment/Portfolio). This portion of the Unit is not to be assessed in the year-end examination.

Theme: Natural Resources: Balance in nature

Unit IV: Our Environment

Chapter -14 Natural Resources

Physical resources: Air, Water, Soil. Air for respiration, for combustion, for moderating temperatures; movements of air and its role in bringing rains across India.

Air, water and soil pollution (brief introduction). Holes in ozone layer and the probable damages.

Bio-geo chemical cycles in nature: Water, Oxygen, Carbon and Nitrogen.

PRACTICALS

Practicals should be conducted alongside the concepts taught in theory classes.

TERM-I

LIST OF EXPERIMENTS

- 1. Preparation of:
 - 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
 - stabilityUnit-I: (Chapter -2)
- 2. Preparation of
 - 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 heatUnit-I:(Chapter-2)
- 3. Perform the following reactions and classify them as physical or chemical changes
 - 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.

Unit-I:(Chapter-2)

- 4. Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams. Unit-II:(Chapter-5)
- 5. Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

 Unit-II:(Chapter-6)

TERM-II

LIST OF EXPERIMENTS

- 1. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder. Unit-III:(Chapter-10)
- 2. Establishing the relation between the loss in weight of a solid when fully immersed in
 - a) Tap water
 - b) Strongly salty water with the weight of water displaced by it by taking at least two different solids. Unit-III:(Chapter-10)
- 3. Verification of the law of conservation of mass in a chemical reaction. **Unit-I:(Chapter-3)**

COURSE STRUCTURE

CLASS X

EVALUATION SCHEME		
THEORY		
Units	Term - I	Marks
I	Chemical Substances-Nature and Behaviour: Chapter 1,2 and 3	16
II	World of Living: Chapter 6	10
III	Natural Phenomena: Chapter 10 and 11	14
Units	Term - II	Marks
I	Chemical Substances-Nature and Behaviour: Chapter 4 and 5	10
II	World of Living: Chapter 8 and 9	13
IV	Effects of Current: Chapter 12 and 13	12
V	Natural Resources: Chapter 15	05
Total Theory (Term I+II)		80
Internal A	Assessment: Term I	10
Internal Assessment: Term II		10
Grand Total		100

TERM - I

Theme: Materials

Unit I: Chemical Substances - Nature and Behaviour

Chapter -1 Chemical reactions and equations

Chemical reactions: Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.

<u>Chapter – 2 Acids, Bases and Salts</u>

Acids, bases and salts: Their definitions in terms of furnishing of H⁺ and OH⁻ ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

Chapter – 3 Metals and non – metals

Metals and nonmetals: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds.

Theme: The World of the Living

Unit II: World of Living

<u>Chapter – 6 Life processes</u>

Life processes: 'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants

and animals.

Theme: How Things Work

Unit III: Natural Phenomena

<u>Chapter – 10 Light – Reflection and Refraction</u>

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.

Chapter – 11 Human eye and colourful world

Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.

TERM - II

Theme: Materials

Unit I: Chemical Substances - Nature and Behaviour

<u>Chapter – 4 Carbon and its compounds</u>

Carbon compounds: Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series.

<u>Chapter – 5 Periodic classification of elements</u>

Periodic classification of elements: Need for classification, early attempts at classification of elements (Dobereiner's Triads, Newland's Law of Octaves, Mendeleev's Periodic Table), Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties.

Theme: The World of the Living

Unit II: World of Living

<u>Chapter – 8 How do organisms</u> reproduce?

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.

Chapter – 9 Heredity and Evolution

Heredity: Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination: brief introduction:

Theme: Natural Phenomena

Unit IV: Effects of Current

Chapter – 12 Electricity

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.

Chapter – 13 Magnetic effects of current

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, Electric Motor, Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule.

Theme: Natural Resources

Unit V: Natural Resources

Chapter – 15 Our Environment

Our environment: Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.

ONLY FOR INTERNAL ASSESSMENT

Note: Learners are assigned to read the below listed part of Unit V. They can be encouraged to prepare a brief write up on any one concept of this Unit in their Portfolio. This may be an assessment for Internal Assessment and credit may be given (Periodic assessment/Portfolio). This portion of the Unit is not to be assessed in the year-end examination.

<u>Chapter - 16 Management of natural resources:</u> Conservation and judicious use of natural resources. Forest and wild life; Coal and Petroleum conservation. Examples of people's participation for conservation of natural resources. Big dams: advantages and limitations; alternatives, if any. Water harvesting. Sustainability of natural resources.

PRACTICALS

Practical should be conducted alongside the concepts taught in theory classes.

TERM-I

LIST OF EXPERIMENTS

- 1. A. Finding the pH of the following samples by using pH paper/universal indicator:
 - (i) Dilute Hydrochloric Acid
 - (ii) Dilute NaOH solution
 - (iii) Dilute Ethanoic Acid solution
 - (iv) Lemon juice
 - (v) Water
 - (vi) Dilute Hydrogen Carbonate solution
 - B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:
 - a) Litmus solution (Blue/Red)
 - b) Zinc metal
 - c) Solid sodium carbonate**Unit–I:(Chapter-2)**
- 2. Performing and observing the following reactions and classifying them into:
 - A. Combination reaction
 - B. Decomposition reaction
 - C. Displacement 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.

Unit-I:(Chapter-1)

- 3. A. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:
 - (i) $ZnSO_4(aq)$
 - (ii) FeSO₄(aq)
 - (iii) CuSO₄(aq)
 - $(iv)Al_2(SO_4)_3(aq)$
 - B. Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result. **Unit-I**:(Chapter-3)
- 4. Experimentally show that carbon dioxide is given out during respiration.

Unit-II:(Chapter-6)

- 5. Determination of the focal length of (i) Concave mirror and (ii) Convex lens by obtaining the image of a distant object.

 Unit-III:(Chapter- 10)
- 6. 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:(Chapter-10)

7. Tracing the path of the rays of light through a glass prism.

Unit-III:(Chapter-11)

TERM-II

LIST OF EXPERIMENTS

1. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determining its resistance. Also plotting a graph between V and I.

Unit-IV:(Chapter-12)

2. Studying (a) binary fission in *Amoeba*, and (b) budding in yeast and Hydra with the help of prepared slides. Unit-II:(Chapter-8)

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

Assessment Areas (Theory) 2021-22 (Class X) Science (086)

Theory TotalMaximum Marks: 80

Competencies	Marks
Demonstrate Knowledge and Understanding	46 %
Application of Knowledge/Concepts	22 %
Analyze, Evaluate and Create	32 %

Note:

• Internal choice would be provided.

Internal Assessment – Term I and II (10 Marks each)

- **Periodic Assessment** 03 marks
- **Multiple Assessment** 02 marks
- **Subject Enrichment** (Practical Work) 03 marks
- **Portfolio** 02 marks

SOCIAL SCIENCE

CLASS IX-X (2021-22) CODE NO. (087) TERM WISE CURRICULUM

Social Science is a compulsory subject up to secondary stage of school education. It is an integral component of general education because it helps the learners to understand the environment in its totality and developing a broader perspective and an empirical, reasonable and humane outlook. This is of crucial importance because it helps them grow into well-informed and responsible citizens with necessary attributes and skills for being able to participate and contribute effectively in the process of development and nation-building.

The Social Science curriculum draws its content mainly from History, Geography, Political Science and Economics. Some elements of Sociology and Commerce are also included. Together they provide a comprehensive view of society over space and time, and in relation to each other. Each subject's distinct methods of enquiry help the learners to understand society from different angles and form a holistic view.

Objectives

The main objectives of this syllabus are to:

- develop an understanding of the processes of change and development-both in terms of time and space, through which human societies have evolved
- make learners realise that the process of change is continuous and any event or phenomenon or issue cannot be viewed in isolation but in a wider context of time and space
- develop an understanding of contemporary India with its historical perspective, of the basic framework of the goals and policies of national development in independent India, and of the process of change with appropriate connections to world development
- deepen knowledge about and understanding of India's freedom struggle and of the values and ideals that it represented, and to develop an appreciation of the contributions made by people of all sections and regions of the country
- help learners understand and cherish the values enshrined in the Indian Constitution and to prepare them for their roles and responsibilities as effective citizens of a democratic society
- deepen the knowledge and understanding of India's environment in its totality, their interactive processes and effects on the future quality of people's lives
- facilitate the learners to understand and appreciate the diversity in the land and people of the country with its underlying unity
- develop an appreciation of the richness and variety of India's heritage-both natural and cultural and the need for its preservation

- promote an understanding of the issues and challenges of contemporary Indiaenvironmental, economic and social, as part of the development process
- help pupils acquire knowledge, skills and understanding to face the challenges of contemporary society as individuals and groups and learn the art of living a confident and stress-free life as well as participating effectively in the community
- develop scientific temperament by promoting the spirit of enquiry and following a rational and objective approach in analysing and evaluating data and information as well as views and interpretations
- develop academic and social skills such as critical thinking, communicating
 effectively both in visual and verbal forms cooperating with others, taking
 initiatives and providing leadership in solving others' problems
- develop qualities clustered around the personal, social, moral, national and spiritual values that make a person humane and socially effective.

COURSE STRUCTURE CLASS IX (2021-22)

TERM- I

		M. MAR	M. MARKS: 40	
No.	Units	No. of Periods	Marks	
	India and the Contemporary World -1	17	10	
Ш	Contemporary India – I	14	10	
III	Democratic Politics – I	20	10	
IV	Economics	20	10	
	Total	71	40	

TERM-II

	M. MARKS		KS: 40
No.	Units	No. of Periods	Marks
ı	India and the Contemporary World -1	34	10
II	Contemporary India – I	24	10
III	Democratic Politics – I	18	10
IV	Economics	10	10
	Total	86	40

COURSE CONTENT-IX

TERM- I			
Unit 1: India and the Contemporary World – I			
Themes	Learning Objectives		
Section 1: Events and Processes: (Theme one)	In this theme students would get familiarized with distinct ideologies, extracts of speeches, political declarations, as well as the politics of caricatures, posters and engravings. Students would learn how to interpret these kinds of historical evidences.		
I. The French Revolution			
 French Society during the late eighteenth century The Outbreak of the Revolution France abolishes Monarchy and Becomes a Republic Did Women have a Revolution? The Abolition of Slavery The Revolution and Everyday Life 	 Familiarize with the names of people involved, the different types of ideas that inspired the revolution, the wider forces that shaped it. Know the use of written, oral and visual material to recover the history of revolutions. 		
Unit 2: Contemporary India – I			
Themes	Learning Objectives		
1. IndiaSize and LocationIndia and the WorldIndia's Neighbours	Identify the location of India in the Indian subcontinent.		
2. Physical Features of IndiaMajor Physiographic Divisions	Understand the major landform features and the underlying geological structure; their association with various rocks and minerals as well as nature of soil types.		
Unit 3: Democratic Politics – I			
Themes	Learning Objectives		
1. What is Democracy? Why Democracy?What is Democracy?Features of DemocracyWhy Democracy?	 Develop conceptual skills of defining democracy. Understand how different historical processes and forces have promoted democracy. 		

 Broader Meaning of Democracy 2. Constitutional Design Why do we need a Constitution? Making of the Indian Constitution Guiding Values of the Indian Constitution 	 Develop a sophisticated defence of democracy against common prejudices. Develop a historical sense of the choice and nature of democracy in India. Understand the process of Constitution making. Develop respect for the Constitution and appreciation for Constitutional values. Recognize Constitution as a dynamic and living document.
Unit 4: Economics	
Themes	Learning Objectives
1. The Story of Village PalampurOverviewOrganization of production	Familiarize with basic economic concepts through an imaginary start of a village.
 Farming in Palampur Non-farm activities of Palampur 	through an imaginary story of a village.
Farming in Palampur	through an imaginary story of a village.

LIST OF MAP ITEMS CLASS IX (2021-22)

TERM - I

SUBJECT - HISTORY

Chapter-1: The French Revolution

Outline Political Map of France

- Bordeaux
- Nantes
- Paris
- Marseilles

SUBJECT – GEOGRAPHY

Chapter -1: India-Size and Location

• India-States with Capitals, Tropic of Cancer, Standard Meridian

Chapter -2: Physical Features of India

- Mountain Ranges: The Karakoram, The Zasker, The Shivalik, The Aravali, The Vindhya, The Satpura, Western & Eastern Ghats
- Mountain Peaks K2, Kanchan Junga, Anai Mudi
- Plateau Deccan Plateau, Chotta Nagpur Plateau, Malwa Plateau
- Coastal Plains Konkan, Malabar, Coromandel & Northern Circar

COURSE CONTENT - IX

TERM II			
Unit 1: India and the Contemporary World – I			
Themes	Learning Objectives		
Section 1: Events and Processes: (Theme two and three)	In each of these two themes in this unit students would get familiarized with distinct ideologies, extracts of speeches, political declarations, as well as the politics of caricatures, posters and engravings. Students would learn how to interpret these kinds of historical evidences.		
II. Socialism in Europe and the	Explore the history of socialism through		
Russian Revolution	the study of Russian Revolution.		
 The Age of Social Change The Russian Revolution The February Revolution in Petrograd 	Familiarize with the different types of ideas that inspired the revolution.		
 What Changed after October? The Global Influence of the Russian Revolution and the USSR III. Nazism and the Rise of Hitler Birth of the Weimar Republic Hitler's Rise to Power The Nazi Worldview Youth in Nazi Germany Ordinary People and the Crimes Against Humanity 	 Discuss the critical significance of Nazism in shaping the politics of modern world. Get familiarized with the speeches and writings of Nazi Leaders. 		
Unit 2: Contemporary India – I			
Themes	Learning Objectives		
 3. Drainage Major rivers and tributaries Lakes Role of rivers in the economy Pollution of rivers Note: Only Map Items as given in the Map List from this chapter to be evaluated in Examination. 	Identify the river systems of the country and explain the role of rivers in the human society.		
 4. Climate Concept Climatic Controls Factors influencing India's climate The Indian Monsoon Distribution of Rainfall Monsoon as a unifying bond 5. Natural Vegetation and Wild Life Factors affecting Vegetation 	 Identify various factors influencing the climate and explain the climatic variation of our country and its impact on the life of people. Explain the importance and unifying role of monsoons. 		

Vegetation types Wild Life Conservation Unit 3: Democratic Politics – I Themes S. Electoral Politics Why Elections? What is our System of Elections? What makes elections in India democratic? Working of Institutions How is the major policy decision taken? Parliament Political Executive Judiciary	 Explain the nature of diverse flora and fauna as well as their distribution. Develop concern about the need to protect the biodiversity of our country. Learning Objectives Understand representative democracy via competitive party politics. Familiarize with Indian electoral system. Reason out for the adoption of present Indian Electoral System. Develop an appreciation of citizen's increased participation in electoral politics. Recognize the significance of the Election Commission. Get an overview of central governmental structures. Identify the role of Parliament and its procedures. Distinguish between political and permanent executive authorities and 	
	 functions. Understand the parliamentary system of executive's accountability to the legislature. Understand the working of Indian 	
	Judiciary.	
Unit 4: Economics		
Themes	Learning Objectives	
 3. Poverty as a Challenge Two typical cases of poverty Poverty as seen by Social Scientists Poverty Estimates Vulnerable Groups Interstate disparities Global Poverty Scenario Causes of Poverty Anti-poverty measures The Challenges Ahead 	 Understand poverty as a challenge. Identify vulnerable group and interstate disparities. Appreciate the initiatives of the government to alleviate poverty. 	

LIST OF MAP ITEMS CLASS IX (2021-22) TERM- II

SUBJECT - HISTORY

Chapter-2: Socialism in Europe and the Russian Revolution

Outline Political Map of World (For locating and labeling / Identification)

Major countries of First World War

(Central Powers and Allied Powers)

Central Powers - Germany, Austria-Hungary, Turkey (Ottoman Empire)

Allied Powers - France, England, Russia, U.S.A.

Chapter-3: Nazism and Rise of Hitler

Outline Political Map of World (For locating and labeling / Identification)

• Major countries of Second World War

Axis Powers - Germany, Italy, Japan

Allied Powers – UK, France, Former USSR, USA

• Territories under German expansion (Nazi Power)

Austria, Poland, Czechoslovakia (only Slovakia shown in the map), Denmark, Lithuania, France, Belgium

SUBJECT - GEOGRAPHY (Outline Political Map of India)

Chapter -3: Drainage

- Rivers: (Identification only)
 - o The Himalayan River Systems-The Indus, The Ganges, and The Satluj
 - The Peninsular rivers-The Narmada, The Tapi, The Kaveri, The Krishna, The Godavari, The Mahanadi
- Lakes: Wular, Pulicat, Sambhar, Chilika

Chapter - 4: Climate

• Areas receiving rainfall less than 20 cm and over 400 cm (Identification only)

Chapter - 5: Natural Vegetation and Wild Life

- Vegetation Type: Tropical Evergreen Forest, Tropical Deciduous Forest, Thorn Forest, Montane Forests and Mangrove- For identification only
- National Parks: Corbett, Kaziranga, Ranthambor, Shivpuri, Kanha, Simlipal & Manas
- Bird Sanctuaries: Bharatpur and Ranganthitto
- Wild Life Sanctuaries: Sariska, Mudumalai, Rajaji, Dachigam (Location and Labelling)

INTERNAL ASSESSMENT

	Marks	Description		
Periodic Assessment	10	Pen Paper Test	5	
	Marks	Tent aper rest	marks	
		Assessment using multiple strategies	5	
		For example, Quiz, Debate, Role Play,	marks	
		Viva, Group Discussion, Visual		
		Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept		
		Maps, Peer Assessment, Self-		
		Assessment, etc.		
Portfolio	5 Marks	Classwork and Assignments		
		Any exemplary work done by the student		
		Reflections, Narrations, Journals, etc.		
		Achievements of the student in the subject		
		throughout the year	activitios	
		 Participation of the student in different activities like Heritage India Quiz 		
Subject Enrichment	5 Marks			
Activity				
TOTAL	20 MADE	DIVE		
TOTAL	20 MARK	13		

PROJECT WORK

CLASS IX (2021-22)

05 Marks

- 1. Every student has to compulsorily undertake one project on Disaster Management.
- 2. **Objectives**: The main objectives of giving project work on Disaster Management to the students are to:
 - a. create awareness in them about different disasters, their consequences and management
 - b. prepare them in advance to face such situations
 - c. ensure their participation in disaster mitigation plans
 - d. enable them to create awareness and preparedness among the community.
- 3. The project work should also help in enhancing the Life Skills of the students.
- 4. If possible, *different forms of art* may be integrated in the project work.

- 5. In order to realize the expected objectives completely, 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 Defense etc. in the area where the schools are located.
- 6. The distribution of marks over different aspects relating to Project Work is as follows:

S. No.	Aspects	Marks
a.	Content accuracy, originality and analysis	2
b.	Presentation and creativity	2
C.	Viva Voce	1

- 7. The project carried out by the students should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.
- 8. All documents pertaining to assessment under this activity should be meticulously maintained by the schools.
- 9. A Summary Report should be prepared highlighting:
 - a. objectives realized through individual work and group interactions
 - b. calendar of activities
 - c. innovative ideas generated in the process (like comic strips, drawings, illustrations, script play etc.);
 - d. list of questions asked in viva voce.
- 10. 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.
- 11. The Project Report should be handwritten by the students themselves.
- 12. The record of the project work (internal assessment) should be kept for a period of three months for verification, if any.

Note: Please procure latest reprinted edition of prescribed NCERT textbooks.

COURSE STRUCTURE CLASS X (2021-22)

TERM - I

M. MARKS: 4		0	
No.	Units	No. of Periods	Marks
	India and the Contemporary World -1	12	10
П	Contemporary India – I	16	10
III	Democratic Politics – I	14	10
IV	Economics	20	10
	Total	62	40

TERM- II

M. MARKS: 4			40
No.	Units	No. of Periods	Marks
I	India and the Contemporary World -1	34	10
Ш	Contemporary India – I	19	10
III	Democratic Politics – I	14	10
IV	Economics	22	10
	Total	89	40

COURSE CONTENT - X

TERM- I			
Unit 1: India and the Contemporary World – II			
Themes	Learning Objectives		
Section 1: Events and Processes			
 1. The Rise of Nationalism in Europe The French Revolution and the Idea of the Nation The Making of Nationalism in Europe The Age of Revolutions: 1830-1848 The Making of Germany and Italy Visualizing the Nation Nationalism and Imperialism 	 Enable the learners to identify and comprehend the forms in which nationalism developed along with the formation of nation states in Europe in the post-1830 period. Establish the relationship and bring out the difference between European nationalism and anti-colonial nationalisms. Understand the way the idea of nationalism emerged and led to the formation of nation states in Europe and elsewhere. 		

Unit 2: Contemporary India – II	
Themes	Learning Objectives
1. Resources and Development	Understand the value of resources and
Types of Resources	the need for their judicious utilization
 Development of Resources 	and conservation.
Resource Planning in India	
 Land Resources 	
Land Utilization	
 Land Use Pattern in India 	
 Land Degradation and Conservation 	
Measures	
 Soil as a Resource 	
 Classification of Soils 	
Soil Erosion and Soil Conservation	
3. Water Resources	
Water Scarcity and The Need for Water	Comprehend the importance of water
Conservation and Management	as a resource as well as develop
Multi-Purpose River Projects and	awareness towards its judicious use
Integrated Water Resources	and conservation.
Management	 Identify different Dams in the country.
Rainwater Harvesting	
Note: The theoretical aspect of chapter 'Water Resources' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination. However, the map items of this chapter as listed will be evaluated in Board Examination.	
4. Agriculture	Explain the importance of agriculture in
 Types of farming 	national economy.
Cropping Pattern	 Identify various types of farming and
Major Crops	discuss the various farming methods;
Technological and Institutional Reforms	describe the spatial distribution of major
Impact of Globalization on Agriculture	crops as well as understand the
	relationship between rainfall regimes
	and cropping pattern.
	 Explain various government policies for
	institutional as well as technological
	reforms since independence.

Unit 3: Democratic Politics – II		
Themes Learning Objectives		
 Power Sharing Case Studies of Belgium and Sri Lanka Why power sharing is desirable? Forms of Power Sharing 2. Federalism	 Familiarize with the centrality of power sharing in a democracy. Understand the working of spatial and social power sharing mechanisms. 	
 What is Federalism? What make India a Federal Country? How is Federalism practiced? Decentralization in India 	 Analyse federal provisions and institutions. Explain decentralization in rural and urban areas. 	
Unit 4: Economics	Learning Objectives	
Themes	Learning Objectives	
 Development What Development Promises - Different people different goals Income and other goals National Development How to compare different countries or states? Income and other criteria Public Facilities Sustainability of development 	 Familiarize with concepts of macroeconomics. Understand the rationale for overall human development in our country, which includes the rise of income, improvements in health and education rather than income. Understand the importance of quality of life and sustainable development. 	
 2. Sectors of the Indian Economy Sectors of Economic Activities Comparing the three sectors Primary, Secondary and Tertiary Sectors in India Division of sectors as organized and unorganized Sectors in terms of ownership: Public and Private Sectors 	 Identify major employment generating sectors. Reason out the government investment in different sectors of economy. 	

LIST OF MAP ITEMS CLASS X (2021-22) TERM – I

A. GEOGRAPHY

Chapter 1: Resources and Development

a. Major soil Types

Chapter 3: Water Resources

Dams:

- a. Salal
- b. Bhakra Nangal
- c. Tehri
- d. Rana Pratap Sagar
- e. Sardar Sarovar
- f. Hirakud
- g. Nagarjuna Sagar
- h. Tungabhadra

Note: The theoretical aspect of chapter 'Water Resources' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination. However, the map items of this chapter as listed above will be evaluated in Board Examination.

Chapter 4: Agriculture

- a. Major areas of Rice and Wheat
- b. Largest / Major producer States of Sugarcane, Tea, Coffee, Rubber, Cotton and Jute

COURSE CONTENT – X

TERM - II			
Unit 1: India and the Contemporary World – II			
Themes	Learning Objectives		
Section 1: Events and Processes			
 2. Nationalism in India The First World War, Khilafat and Non - Cooperation Differing Strands within the Movement Towards Civil Disobedience The Sense of Collective Belonging 	 Recognize the characteristics of Indian nationalism through a case study of Non-Cooperation and Civil Disobedience Movement. Analyze the nature of the diverse social movements of the time. Familiarize with the writings and ideals of different political groups and individuals. Appreciate the ideas promoting Pan Indian belongingness. 		
Section 2: Livelihoods, Economies and Societies			
Note: Any one theme of the following. The theme selected should be assessed in the periodic test only and will not be evaluated in the board examination:			
 3. The Making of a Global World The Pre-modern world The Nineteenth Century (1815-1914) The Inter war Economy Rebuilding a World Economy: The Post-War Era 4. The Age of Industrialization 	 Show that globalization has a long history and point to the shifts within the process. Analyze the implication of globalization for local economies. Discuss how globalization is experienced differently by different social groups. 		
 Before the Industrial Revolution Hand Labour and Steam Power Industrialization in the colonies Factories Come Up The Peculiarities of Industrial Growth Market for Goods 	 Familiarize with the Pro- to-Industrial phase and Early – factory system. Familiarize with the process of industrialization and its impact on labour class. Enable them to understand industrialization in the colonies with reference to Textile industries. 		

Unit 2: Contemporary India – II		
Themes	Learning Objectives	
 Minerals and Energy Resources What is a mineral? Mode of occurrence of Minerals Ferrous and Non-Ferrous Minerals Non-Metallic Minerals Rock Minerals Conservation of Minerals Energy Resources Conventional Conventional Conservation of Energy Resources Note: The theoretical aspect of chapter 'Minerals and Energy Resources' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination. However, the map items of this chapter as given in the Map List will be evaluated in Board Examination	 Identify different types of minerals and energy resources and places of their availability Feel the need for their judicious utilization 	
 6. Manufacturing Industries Importance of manufacturing Contribution of Industry to National Economy Industrial Location Classification of Industries Spatial distribution Industrial pollution and environmental degradation Control of Environmental Degradation 	 Bring out the importance of industries in the national economy as well as understand the regional disparities which resulted due to concentration of industries in some areas. Discuss the need for a planned industrial development and debate over the role of government towards sustainable development. 	
 7. Life Lines of National Economy Transport – Roadways, Railways, Pipelines, Waterways, Airways Communication International Trade Tourism as a Trade 	 Explain the importance of transport and communication in the ever-shrinking world. Understand the role of trade and tourism in the economic development of a country. 	
Unit 3: Democratic Politics – II		
Themes	Learning Objectives	
6. Political Parties		
	Analyze party systems in democracies.	

- Why do we need Political Parties?
- How many Parties should we have?
- National Political Parties
- State Parties
- Challenges to Political Parties
- How can Parties be reformed?

7. Outcomes of Democracy

- How do we assess democracy's outcomes?
- Accountable, responsive and legitimate government
- Economic growth and development
- Reduction of inequality and poverty
- Accommodation of social diversity
- · Dignity and freedom of the citizens

- Introduction to major political parties, challenges faced by them and reforms in the country.
- Evaluate the functioning of democracies in comparison to alternative forms of governments.
- Understand the causes for continuation of democracy in India.
- Distinguish between sources of strengths and weaknesses of Indian democracy.

Unit 4: Economics

Themes Learning Objectives

3. Money and Credit

- Money as a medium of exchange
- Modern forms of money
- Loan activities of Banks
- Two different credit situations
- Terms of credit
- Formal sector credit in India
- Self Help Groups for the Poor
- 4. Globalization and the Indian Economy
 - Production across countries
 - Interlinking production across countries
 - Foreign Trade and integration of markets
 - What is globalization?
 - Factors that have enabled Globalization
 - World Trade Organization
 - Impact of Globalization on India
 - The Struggle for a fair Globalization

- Understand money as an economic concept.
- Understand the role of financial institutions from the point of view of dayto- day life.
- Explain the working of the Global Economic phenomenon.

LIST OF MAP ITEMS CLASS X (2021-22) TERM – II

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A. **HISTORY** (Outline Political Map of India)

Chapter - 2 Nationalism in India – (1918 – 1930) for Locating and Labelling / Identification

1. Indian National Congress Sessions:

- a. Calcutta (Sep. 1920)
- b. Nagpur (Dec. 1920)
- c. Madras (1927)

2. Important Centres of Indian National Movement

- a. Champaran (Bihar) Movement of Indigo Planters
- b. Kheda (Gujarat) Peasant Satyagrah
- c. Ahmedabad (Gujarat) Cotton Mill Workers Satyagraha
- d. Amritsar (Punjab) Jallianwala Bagh Incident
- e. Chauri Chaura (U.P.) Calling off the Non-Cooperation Movement
- f. Dandi (Gujarat) Civil Disobedience Movement

B. GEOGRAPHY (Outline Political Map of India)

Chapter 5: Minerals and Energy Resources

Power Plants-(Locating and Labelling only)

- a. Thermal
 - Namrup
 - Singrauli
- b. Nuclear
 - Narora
 - Kakrapara

- Ramagundam
- Tarapur
- Kalpakkam

Chapter 6: Manufacturing Industries (Locating and Labelling Only) **Cotton Textile Industries:**

- a. Mumbai
- b. Indore
- c. Surat
- Iron and Steel Plants:
 - a. Durgapur
 - b. Bokaro
 - c. Jamshedpur
- **Software Technology Parks:**
 - a. Noida
 - b. Gandhinagar
 - c. Mumbai
 - d. Pune

- d. Kanpur
- e. Coimbatore
- d. Bhilai
- e. Vijaynagar
- f. Salem
- e. Hyderabad
- f. Bengaluru
- q. Chennai
- h. Thiruvananthapuram

Chapter 7: Lifelines of National Economy

Major Ports: (Locating and Labelling)

- a. Kandla
- b. Mumbai
- c. Marmagao
- d. New Mangalore
- e. Kochi

International Airports:

- a. Amritsar (Raja Sansi)
- b. Delhi (Indira Gandhi International)
- c. Mumbai (Chhatrapati Shivaji)
- d. Chennai (Meenam Bakkam)
- e. Kolkata (Netaji Subhash Chandra Bose)
- f. Hyderabad (Rajiv Gandhi)

- f. Tuticorin
- g. Chennai
- h. Vishakhapatnam
- i. Paradip
- j. Haldia

INTERNAL ASSESSMENT

	Marks	Description	
Periodic Assessment	10 Marks	Pen Paper Test Assessment using multiple strategies For example, Quiz, Debate, Role Play, Viva, Group Discussion, Visual Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept Maps, Peer Assessment, Self-Assessment, etc.	5 marks 5 marks
Portfolio	5 Marks	 Classwork and Assignments Any exemplary work done by the student 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 	
Subject Enrichment Activity	5 Marks	Project Work	
TOTAL	20 MARKS		

PROJECT WORK CLASS X (2021-22)

05 Marks

1. **Every student** has to compulsorily undertake **any one project** on the following topics:

Consumer Awareness
OR
Social Issues
OR

Sustainable Development

2. **Objective:** The overall objective of the project work is to help students gain an insight and pragmatic understanding of the theme and see all the Social Science disciplines from interdisciplinary perspective. It should also help in enhancing the Life Skills of the students.

Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.

If required, students may go out for collecting data and use different primary and secondary resources to prepare the project. If possible, *different forms of Art* may be integrated in the project work.

S. No.	Aspects	Marks
a.	Content accuracy, originality and analysis	2
b.	Presentation and creativity	2
C.	Viva Voce	1

- 3. The distribution of marks over different aspects relating to Project Work is as follows:
- 4. The projects carried out by the students in different topics should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.
- 5. All documents pertaining to assessment under this activity should be meticulously maintained by concerned schools.
- 6. A Summary Report should be prepared highlighting:
 - objectives realized through individual work and group interactions;
 - calendar of activities;

- innovative ideas generated in the process (like comic strips, drawings, illustrations, script play etc.);
- list of questions asked in viva voce.
- 7. 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.
- 8. The Project Report should be handwritten by the students themselves.
- 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. Subjudiced cases, if any or those involving RTI / Grievances may however be retained beyond three months.

PRESCRIBED BOOKS:

- 1. India and the Contemporary World-II (History) Published by NCERT
- 2. Contemporary India II (Geography) Published by NCERT
- 3. Democratic Politics II (Political Science) Published by NCERT
- 4. Understanding Economic Development Published by NCERT
- Together Towards a Safer India Part III, a textbook on Disaster Management -Published by CBSE
- 6. Learning Outcomes at the Secondary Stage Published by NCERT

Note: Please procure latest reprinted edition of prescribed NCERT textbooks.

SYLLABUS URDU COURSE(B) CODE 303 CLASS IX(2021-22) TERM 1

M.M.:40

Time Allotted: 90 minutes

PART A (MCQ 20 marks) Reading, comprehension and grammar

حصتہ (الف) متبادل جواب والے سوالات عبارت فہمی، شعر فہمی اور عملی قواعد

*دو غیر درسی اقتباسات(Unseen Passage) (ایک نثری اور ایک شعری) دیئے جا ئیں گے۔ دونوں اقتسابات پانچ پانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دیئے جائیں گے دونوں اقتباس میں پانچ متبادل جواب والے سوالات دیئے جائیں گے دونوں میں سے ایک کرنا ہوگا۔

*دو درسی اقتباسات(Seen Passage) (ایک نثری اور ایک شعری) دیئے جایئ گے۔ دونوں اقتسابات پانچ۔ پانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دیئے جائیں گے۔دونوں اقتباس میں پانچ متبادل جواب والے سوالات دیئے جائیں گے۔دونوں میں سے ایک کرنا ہوگا۔

*عملي قواعد

*اسم اور اس کی قسمیں

*ضمير

*واحد اور جمع

*متضاد اور مترادف

PART B Writing skill and literature (MCQ 20 Marks)

حصتہ (ب) تحریری مہارت اور درسی کتاب اس میں کثیر انتخابی سوالات 20 نمبر کے ہونگے۔ درسی کتاب میں دیئے گئے نثری اسباق میں سے اورا سباق کے مصنفین کے حالات زندگی، طرز تحریر، کہانی کے کردار وغیر ہ سے متبادل جواب والے سوالات دیئے جائیں گے۔

*درسی کتاب میں دیئے گئےشعری اسباق میں سے اور انکے شعرا کے حالات زندگی سے متبادل جوابات والے سوالات دیئے جائیں گے۔

نصاب:

*درسی کتاب جان پہچان حصّہ 4 (نویں جماعت کے لئے)سبق 1سے 11تک *اردو قواعد اور انشا۔

R shidi.

SYLLABUS URDU COURSE(B) CODE 303 CLASS IX(2021-22) TERM 2

M.M.:40

Time Allotted: 120 minutes

PART A (20 marks)

Reading, comprehension and grammar

حصّه (الف) عبارت فهمی، شعر فهمی اور عملی قواعد

*دو غیر درسی اقتباسات(Unseen Passage) (ایک نثری اور ایک شعری) دیئے جا ئیں گے۔ دونوں اقتسابات پانچ۔ پانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دیئے جائیں گے۔دونوں اقتباس میں عبارت فہمی اور شعر فہمی سے متعلق ایک جملے پر مشتمل جواب والے پانچ سوالات دیئے

جائیں گے دونوں میں سے ایک کرنا ہوگا۔

*دو درسی اقتباسات(Seen Passage) (ایک نثری اور ایک شعری) دیئے جائیں گے۔ دونوں اقتسابات پانچ -پانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دیئے جائیں گے دونوں اقتباس میں عبارت فہمی سے متعلق اور شعر فہمی سے متعلق ایک جملے پر مشتمل جواب والے پانچ سوالات دیئے جائیں گے دونوں

*عملى قواعد: مختصر جواب والم سوال

*سابقم و لاحقم

*مزكر و مونث

*تشبيہ

مضمون نگاري:

*مضمون: 250 سے-300 الفاظ پر مشتمل مضمون لکھوایا جائگا ۔

قومی تہوار،تاریخی مقامات کی سیر، اسکول کا سالانہ جلسہ، پسندیدہ شخصیت، صحت اور کھیل کو د و غیر ہ۔

PART B (20 Marks) Writing skill and literature

حصته (ب) تحریری مهارت اور درسی کتاب

اس میں کثیر انتخابی سوالات 20 نمبر کے ہونگے۔جو 4, 2 نمبر کے ہونگے۔ در خواست یا خطوط نگاری

* در خواست فیس معافی، سیکشن بدلنے،کسی تقریب میں شرکت کی اجازت،چھٹی کی اجازت و غیرہ

*خط - نجی (والدہ ،والد، بھائ بہن، دوستوں وغیرہ کے نام) دفتری - (گاؤں،سوسائٹی،صحت،اور دیگرمسائل سے متعلق) *درسی کتاب سے متعلق نوٹ:

درسی کتاب میں دیئے گئے نثری اسباق کا خلاصہ،مرکزی خیال ، مقاصد، پیغام، مصنفین کی حالات زندگی، طرز تحریر وغیرہ پر کم سے کم 100 الفاظ پر نو ٹ لکھوا با جائگا۔

*درسی اسباق میں دیئے گئے شعری اسباق کا خلاصہ، مرکزی خیال، پیغام، شعرا کے حالات زندگی و غیرہ میں سے کسی ایک پر کم سے کم سو الفاظ پر نوٹ لکھوایا جائگا۔

*درسی کتاب کے نثری اسباق سے تین سوال دیئے جائیں گے۔جن میں سے دو کے جو اب لکھنا ہونگے۔جواب کم سے کم تین جملے کا ہونا چاہئے۔

*درسی کتاب کے شعری اسباق سے تین سوال دیئے جائیں گے۔ جن میں سے دو سوال کے جواب لکھنا ہونگے۔جواب کم سے کم دو جملے کا ہونا چاہئے۔

درسی کتاب

*جان پہچان حصیّہ 4 (نویں جماعت کے لئے) سبق 12سے سبق 22 تک

*اردو قواعد اور انشا

SYLLABUS URDU COURSE(B) CODE 303 CLASS X(2021-22) TERM 1

M.M.:40

Time Allotted: 90 minutes

PART A (MCQ 20 marks)

Reading, comprehension and grammar

حصتہ (الف) متبادل جواب والے سوالات عبارت فہمی، شعر فہمی اور عملی قواعد

*دو غیر درسی اقتباسات(Unseen Passage) (ایک نثری اور ایک شعری) دیئے جا یئ گے۔ دونوں اقتسابات پانچ پانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دئیے جائیں گے دونوں اقتباس میں پانچ متبادل جواب والے سوالات دئیے جائیں گے دونوں میں سے ایک کرنا ہوگا۔

*دو درسی اقتباسات(Seen Passage) (ایک نثری اور ایک شعری) دئیے جائیں گے۔ دونوں اقتسابات پانچ پانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دیئے جائیں گے دونوں اقتباس میں پانچ متبادل جواب والے سوالات دئے جائیں گے دونوں میں سے ایک کرنا ہوگا۔

*عملي قو اعد:

فعل ماضى، فعل حال، فعل مستقبل، فعل معروف، فعل مجهول

اسم معرفه، اسم نكره

رموز اور اوقاف

متضاد اور مترادف الفاظ

PART B (MCQ 20 Marks) Writing skill and literature

حصد (ب) تحریری مهارت، درسی کتاب

اس میں کثیر انتخابی سوالات 20 نمبر کے ہونگے۔

درسی کتاب میں دیئے گئے نثری اسباق میں سے اور اسباق کے مصنفین کے حالات زندگی، طرز تحریر، کہانی کے کردار وغیرہ سے متبادل جواب والے سوالات دیئے جایئل گے۔

*درسی کتاب میں دیئے گئے شعری اسباق میں سے اور انکے شعرا کے حالات زندگی سے متبادل جو ابات والے سوالات دیئے جایئ گئے۔

نصاب:

*درسى كتاب

*جان پہچان حصہ 5(دسویں جماعت کے لئے)سبق 1 سے 11 تک

*اردو قواعد اور انشا

SYLLABUS URDU COURSE(B) CODE 303 CLASS X(2021-22) TERM 2

M.M.:40

Time Allotted:120 minutes

PART A (20 marks)

Reading, comprehension and grammar

حصت (الف) عبارت فهمی، شعر فهمی اور عملی قواعد

*دو غیر درسی اقتباسات(Unseen Passage) (ایک نثری اور ایک شعری) دئیے جا یئی گے۔ دونوں اقتسابات پانچ۔ پانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دیئے جائیں گے۔دونوں اقتباس میں عبارت فہمی سے متعلق سوالات دیئے جائیں گے۔دونوں میں سے ایک کرنا ہوگا۔

*دو درسی اقتباسات(Seen Passage) (ایک نثری اور ایک شعری) دیئے جائیں گے۔ دونوں اقتسابات پانچ بانچ نمبر کے ہونگے۔ نثری اقتباس 100 سے 150 الفاظ پر مشتمل ہوگا اور شعری اقتباس میں دو بند/پانچ اشعار دیئے جائیں گے دونوں اقتباس میں عبارت فہمی سے متعلق سوالات دیئے جائیں گے دونوں

میں سے ایک کرنا ہوگا۔

*عملي قواعد

واحد جمع

سابقه و لاحقه

مزكر و مونث

محاورے اور کہاوتوں کا جملوں میں استعمال

مضمون نگارى:

250 الفاظ يرمشتمل مضمون لكهوايا جائكا

قومی تہوار،تاریخی مقامات کی سیر، اسکول کا سالانہ جلسہ، پسندیدہ شخصیت، صحت اور کھیل کود وغیرہ۔

PART B (20 Marks) Writing skill and literature

حصتہ(ب) تحریری مہارت، درسی کتاب

اس میں کثیر انتخابی سوالات 20 نمبر کے ہونگے۔ج4,,2,3 نمبر کے ہونگے۔ درخواست یا خطوط نگاری:

* در خواست فیس معافی، سیکشن بدانے،کسی تقریب میں شرکت کی اجازت،چھٹی کی اجازت و غیرہ ۔

*خط - نجی (والدہ ،والد، بھائ بہن،دوستوں وغیرہ کے نام) دفتری - (گاؤں،سوسائٹی،صحت،اور دیگرمسائل سے متعلق)

*درسی کتاب سے متعلق نوٹ:

درسی کتاب میں دیئے گئے نثری اسباق کا خلاصہ،مرکزی خیال ، مقاصد، پیغام، مصنفین کی حالات زندگی، طرز تحریر وغیرہ پر کم سے کم 100 الفاظ پر نو ٹ لکھوا یا جائگا۔

*درسی اسباق میں دیئے گئے شعری اسباق کا خلاصہ، مرکزی خیال، پیغام، شعرا کے حالات زندگی وغیرہ میں سے کسی ایک پر کم سے کم 100الفاظ پر نوٹ لکھوایا جائگا۔ *درسی کتاب کے نثری اسباق سے تین سوال دیئے جائیں گے۔جن میں سے دو کے جواب لکھنا ہونگے۔جواب کم سے کم تین جملے کا ہونا چاہئے۔ *درسی کتاب کے شعری اسباق سے تین سوال دیئے جائیں گے۔ جن میں سے دو سوال کے جواب لکھنا ہونگے۔جواب کم سے کم دو جملے کا ہونا چاہئے۔

نصاب.

*درسی کتاب

*جان پہچان حصیّہ 5 (دسویں جماعت کے لئے) سبق 12 سے 22 تک

*اردو قواعد اور انشا

R Abidi.

CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2021-2022

INFORMATION TECHNOLOGY (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, they are responsible for organizing files, collecting and managing data to be entered into the computer. They are also responsible for security of data and safeguard 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
 - The concept of Digital Presentation
 - 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 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 2021-2022)

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

	TERM	UNITS	for T and P	HOURS Theory Practical 00	MAX. MARKS for Theory and Practical 100
	Employa	bility Skills			
		Unit 1 : Communication Skills-I	,	10	
4	TERM I	Unit 2 : Self-Management Skills-I	•	10	5
Part A	Unit 3 : ICT Skills-I			10	
P 9	TERM II	Unit 4 : Entrepreneurial Skills-I		15	_
	IERWIII	Unit 5 : Green Skills-I		05	5
		Total		50	10
	Subject S	Specific Skills	Theory (In Hours)	Practical (In Hours)	Marks
t B	TERM I	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
	TERM II	Unit 4:Electronic Spreadsheet	18	35	10
		Unit 5: Digital Presentation	10	31	10
		Total	44	106	40
S	Practical	Work			
		Practical Examination			15
Part		Written Test			10
		Viva Voce			10
		Total			35
Ω	Project W	/ork/Field Visit			
Part		Practical File/ Student Portfolio			10
a		Viva Voce			05
		Total			15
		GRAND TOTAL	2	00	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: For 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			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL	
1	Appreciate the applications of IT	 Introduction to IT and ITeS, BPO services, BPM industry in India, Structure of the IT-BPM industry, 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, 	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	 Keyboarding Skills, Types of keys on keyboard, Numeric keypad, Home keys, Guide keys, Typing and deleting text, Typing ergonomics, Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows, Pointing device – Mouse, Mouse operations. 	 Identify the keys and its use on the keyboard, Demonstrate to use various keys on the keyboard, Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard, Practice the correct typing ergonomics, Practice to place fingers on correct key in four different row of keyboard, Practice various mouse operations. 	
2.	Use typing software	 Introduction to Rapid Typing Tutor, Touch typing technique, User interface of Typing Tutor, Typing text and interpret results, Working with lesson editor, Calculating typing speed, Typing rhythm. 	 Identify the user interface of typing tutor, Practice to type text in typing tutor software and interpret the results, Practice to work in lesson editor, Calculate the typing speed, □ Practice to improve typing Using typing tutor software. 	

	UNIT 3: DIGITAL DOCUMENTATION			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL	
1.	Create a document using a word processor	 Introduction to word processing, Word processing applications, Introduction to Word Processing tool Creating a document, Parts of a Word Processor Window, Cursor and mouse pointer. 	 List the available word processing applications. Introduce with the parts of the main window. Change document views. Start a new document. Open an existing document. Save a document. Close a document. Use the Navigator. 	
2.	Apply Editing features	 Text editing – Undo and Redo, Moving and copying text, Copy and Paste, Selecting text, Selection criteria, Selecting non-consecutive text items, Selecting a vertical block of text, Find and replace option, Jumping to the page number, Non-printing characters, Checking spelling and grammar, Using Synonyms and Thesaurus. 	 Type some text in the document and edit it, Demonstrate to use undo and redo option, Use the keyboard and mouse options to select, cut, copy, paste, and move text. Demonstrate to select nonconsecutive text items, vertical block of text, Search the word from the text and replace it with another word. Jump to the given page number in a document, Insert non-printing characters in a document, Check spelling and grammar and apply the changes to the document. Demonstrate to use Synonyms and Thesaurus. 	

S.NO.	LEARNING OUTCOMES	THEORY	PRACTICAL
3.	Apply formatting features	 Page style dialog, Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript, Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers, Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image. 	 Apply various text formatting options for the text, Demonstrate to format paragraphs – indent/align paragraphs, assign font colour, highlighting, and background colour, Assign number or bullets to the lists items, Demonstrate to assign colour, border and background to paragraph, Demonstrate the page formatting – set up basic page layout using styles, Insert page break, Create header/footer and page numbers, Define borders and backgrounds Insert images, shapes, special characters in a document, □ Divide page into columns, Format the shape or image.
5.	Create and work with tables Use Print Options	 Creating table in Word Processor, Inserting row and column in a table, Deleting rows and columns, Splitting and merging tables, Deleting a table, □ Copying a table, Moving a table. Printing options in Word Processor. 	 Demonstrate and do the following in Word Processor: Create table, Insert and delete rows and column in a table, Split and merge tables, Delete a table, Copy or move from one location to another location of document. Demonstrate to print the document, selected pages in
		Print preview,Controlling printing,Printing all pages, single and multiple pages.	the documentPrint the document with various options,Preview pages before printing.

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
6.	Understand and apply mail merge	 Concept of mail merge in word processing, Creating a main document, Creating the data source, Entering data in the fields, Merging the data source with main document, Editing individual document, Printing the merged letter, Saving the merged letter. 	Demonstrate to print the letters using mail merge, Do the following to achieve Create a main document, Create the data source, Enter data in the fields, Merge the data source with main document, Edit individual document, Print the merged letter, Save the merged letter.

	UNIT 4: ELECTRONIC SPREADSHEET			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL	
1.	Create a Spreadsheet	 Introduction to spreadsheet application, Starting a spreadsheet, Parts of a spreadsheet Worksheet – Rows and columns, Cell and cell address, Range of cell – column range, row range, row and column range. 	 Start the spreadsheet, Identify the parts of Calc, Identify the rows number, column number, cell address, Define the range of cell, Identify row range, column range, row & column range 	

2.	Apply formula and	Different types of data,	Demonstrate to enter the
	functions in	Entering data – Label, Values,	text, numeric data in a cell,
	spreadsheet	Formula	Identify the label, values and
		Formula, how to enter formula,	formula in the cell,
		Mathematical operators used	Demonstrate to enter formula in
		in formulae,	a cell,
		Simple calculations using	Construct the formula using
		values and operators,	mathematical operators,
		Formulae with cell addresses	Identify formulae with cell
		and operators,	addresses and operators,
		Commonly used basic	Identify the correct syntax of
		functions in a spreadsheet –	formula,
		SUM, AVERAGE, MAX, MIN,	Use the basic functions to
		Count	perform calculations on data.
		Use of functions to do	
		calculations.	
3.	Format data in the	• Formatting tool,	Identify the formatting tool,
	spreadsheet	Use of dialog boxes to format	Demonstrate to use of dialog boxes to format values,
		values,	
		Formatting a range of cells with	Demonstrate to format range of colls with desiral places.
		decimal places,	cells with decimal places,
		• Formatting a range of cells to be seen as labels,	Demonstrate to format a range of cells to labels,
		Formatting of a cell range as	Demonstrate to format of a cell
		scientific,	range as scientific,
		Formatting a range of cells to	Demonstrate to format a range of
		display times,	cells to display time,
		Formatting alignment of a cell	Demonstrate to align cell data
	•	range,	range,
		Speeding up data entry using	Demonstrate to create
		the fill handle,	number series using fill handle,
		Uses of fill handle to copy	Copy formula by dragging the
		formulae.	formula using fill handle.
4.	Understand and	Concept of referencing,	Demonstrate to use Relative
	apply Referencing	Relative referencing, □	referencing in spreadsheet,
		Mixed referencing,	Demonstrate to use Mixed
		Absolute referencing.	referencing in spreadsheet,
			Demonstrate to use Absolute
			referencing in spreadsheet.
5.	Create and insert	Importance of chart in	Create different types of chart
	different types of	spreadsheet,	supported by a spreadsheet,
	charts in a	Types of chart, Example of	Illustrate the example of chart in a
	spreadsheet	chart.	spreadsheet.

	UNIT 5: DIGITAL PRESENTATION			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL	
1.	Understand features of an effective presentation	 Concept of presentation, Elements of presentation, Characteristics of an effective presentation 	 Identify and list the elements of presentation, List the characteristics of an effective presentation. 	
2.	Create a presentation	 Introduction to presentation software, Starting a presentation tool, Parts of a presentation tool window, Closing the presentation tool, Creating a presentation using template, Selecting slide layout, Saving a presentation, Running a slide show, Save a presentation in PDF, □ Closing a presentation, □ Using Help. 	 Start the presentation application various components of main Impress window Observe the different workspace views. Create a new presentation using wizard. Run the presentation, Save the presentation, Close the presentation, Demonstrate to use Help in presentation. 	
3.	Work with slides	 Inserting a duplicate slide, Inserting new slides, Slide layout, Copying and moving slides, Deleting and renaming slides in presentation, Copying, moving and deleting contents of slide, View a presentation, Controlling the size of the view, Workspace views – Normal, Outline, Notes, Slide sorter view. 	 Demonstrate to insert a new slide and duplicate slide in a presentation, Change the slide layout, Demonstrate to copy and move slides in the presentation, Demonstrate to copy, move and delete contents of the slide, Demonstrate to view a presentation in different views. 	

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
4.	Format text and apply animations	 Formatting toolbar, Various formatting features, Text alignment, Bullets and numbering. Custom Animation 	 Identify and list the various options in formatting toolbar, Apply the appropriate formatting option Align the text in presentation, Apply bullets and numbering to the list items in presentation. Apply Animation
5.	Create and use tables	 Inserting tables in presentation, Entering and editing data in a table, Selecting a cell, row, column, table, Adjusting column width and row height, Table borders and background 	 Demonstrate the following: Insert table in presentation, Enter and edit data in a table, Select a cell, row, column, table, Adjust column width and row height, Assign table borders and background.
6.	Insert and format image in presentation	 Inserting an image from a file, Inserting an image from the gallery, Formatting images, Moving images, Resizing images, Rotating images, Formatting using the Image toolbar, Drawing graphic objects – line, shapes, Grouping and un-grouping objects 	 Demonstrate to insert an image from file, gallery in presentation, Apply formatting options to image in presentation, Demonstrate to move, resize and rotate images, Apply formatting options of Image toolbar, Drawing line, shapes using graphic objects, Demonstrate to group and ungroup objects.
7.	Work with slide master	 Slide masters, Creating the slide masters, Applying the slide masters to all slide, Adding transitions. 	 Create the slide masters, Apply the slide masters to the presentation, Add transitions to presentation.

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 – Open Office, Google Suite 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 Technology OR Bachelor Degree in Computer Application/ 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.	 The candidate should have a minimum of 1 year of work experience in the same job role. S/He should be able to communicate in English and local language. S/He should have knowledge of equipment, tools, material, Safety, Health & Hygiene. 	 18-37 years (as on Jan. 01 (year)) Age relaxation to be provided as per Govt. rules

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:

 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 2021-2022

INFORMATION TECHNOLOGY (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 bases. 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 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 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 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
 - The concept of Digital Presentation
 - 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 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

CLASS - X SESSION 2021-2022

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

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 X opting for skill subject along with other subjects. The unit-wise distribution of hours and marks for class X is as follows: z

	INFORMATION TECHNOLOGY (402) Class X (Session 2021-22)					
	TERM	UNITS	NO. O for Th	F HOURS neory and tical 200	MAX. MARKS for Theory and Practical 100	
1	Employability Skills					
Part A	TERM I Unit 1 : Communication Skills-II Unit 2 : Self-Management Skills-II Unit 3 : Information and Communication Technology Skills-II		0	5		
	TERM II	Unit 4 : Entrepreneurial Skills-II Unit 5 : Green Skills-II	0	5	5	
	0.11.15	Total		0	10	
B	Subject S _l	pecific Skills	Theory (In Hours)	Practical (In Hours)	Marks	
Part		Unit 1: Digital Documentation (Advanced)	12	18	8	
	TERM I	Unit 2: Electronic Spreadsheet (Advanced)	15	23	10	
		Unit 3: Database Management System	04	07	02	
	TERM II	Unit 3: Database Management System	14	20	10	
	TERWIN	Unit 4: Web Applications and Security	15	22	10	
		Total	60	90	40	
ပ	Practical \	Vork				
Part (Practical Examination Advanced Documentation: 5 Marks Advanced Spreadsheets: 5 Marks Databases: 10 Mark			20	
		Viva Voce			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
	PORTFOLIO/ PRACTICAL FILE: (Portfolio should contain printouts of the practical done using Writer, Calc and Base with minimum 5 problems of each) Total		10 20
	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 DURATION	50

NOTE: For 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: Digital Documentation (Advanced)	30
2.	Unit 2: Electronic Spreadsheet (Advanced)	38
3.	Unit 3: Database Management System	45
4.	Unit 4: Web Applications and Security	37
	TOTAL DURATION	150

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

3.	Create and use template	 Templates. Using predefined templates. Creating a template. Set up a custom default template. Updating a document. Changing to a different template. Using the Template. 	 Create a template. Use predefined templates. Set up a custom default template. Update a document. Change to a different template. Use the Template.
4.	Create and customize table of contents	 Table of contents. Hierarchy of headings. Customization of table of contents. Character styles. Maintaining a table of contents. 	 Create table of contents. Define a hierarchy of headings. Customize a table of contents. Apply character styles. Maintain a table of contents.
5	Implement Mail Merge	 Advance concept of mail merge in word processing, Creating a main document, Creating the data source, Entering data in the fields, Merging the data source with main document, Editing individual document, Printing a letter and its address label 	 Demonstrate to print the label using mail merge, do the following to achieve Create a main document, Create the data source, Enter data in the fields, Merge the data source with main document, Edit individual document, Print the letter and address label

	UNIT 2: ELECTRONIC SPREADSHEET (ADVANCED)			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL	
1.	Analyse data using scenarios and goal seek.	Creating subtotals.Using "what if" scenarios. Using "what if" toolsUsing goal seek and solver.	 Use consolidating data Create subtotals Use "what if" scenarios Use "what if" tools Use goal seek and solver 	
2.	Link data and spreadsheets	 Setting up multiple sheets. Creating reference to other sheets by using keyboard and mouse. Creating reference to other document by using keyboard and mouse. Relative and absolute hyperlinks Hyperlinks to the sheet. Linking to external data. Linking to registered data sources. 	 Setup multiple sheets by inserting new sheets. Create reference to other sheets by using keyboard and mouse. Create reference to other document by using keyboard and mouse. Create, Edit and Remove hyperlinks to the sheet. Link to external data. Link to registered data source. 	
3.	Share and review a spreadsheet	 Setting up a spreadsheet for sharing. Opening and saving a shared spreadsheet. Recording changes. Add, Edit and Format the comments. Reviewing changes – view, accept or reject changes. Merging and comparing. 	 Set up a spreadsheet for sharing. Open and save a shared spreadsheet. Record changes. Add, Edit and Format the comments. Review changes – view, accept or reject changes. Merge and compare sheets. 	
4.	Create and Use Macros in spreadsheet	 Using the macro recorder. Creating a simple macro. Using a macro as a function. Passing arguments to a macro. Passing the arguments areas values. Macros to work like built-in functions. Accessing cells directly. Sorting the columns using macro. 	 Use the macro recorder. Create a simple macro. Use a macro as a function. Pass arguments to a macro. Pass the arguments are as values. Write macros that act like built-in functions Access cells directly. Sort the columns using macro. 	

·	UNIT 3: DATABASE MANAGEMENT SYSTEM			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL	
1.	Appreciate the concept of Database Management System	 Concept and examples of data and information, Concept of database, Advantages of database, Features of database, Concept and examples of Relational database, Concept and examples of field, record, table, database, Concept and examples of Primary key, composite primary key, foreign key, Relational Data base management system (RDBMS) software. 	 Identify the data and information, Identify the field, record, table in the database, Prepare the sample table with some standard fields. Assign the primary key to the field, Identify the primary key, composite primary key, foreign key. 	
2.	Create and edit tables using wizard and SQL commands	 Introduction to a RDBMS Database objects – tables, queries, forms, and reports of the database, Terms in database – table, field, record, Steps to create a table using table wizard, Data types in Base, Option to set primary key Table Data View dialog box DDL Commands 	 Start the RDBMS and observe the parts of main window, Identify the data base objects Create the sample table in any category using wizard, Practice to create different tables from the available list and choosing fields from the available fields. Assign data types of field, Set primary key, Edit the table in design view, Enter the data in the fields. Create and edit table using DDL Commands 	
3.	Perform operations on table	 Inserting data in the table, Editing records in the table, Deleting records from the table, Sorting data in the table, Referential integrity, Creating and editing relationships – one to one, one to many, many to many, Field properties. 	 Demonstrate to: Insert data in the table, Edit records in the table, Delete records from table, Sort data in the table, Create and edit relationships one to one, one to many, many to many, Enter various field properties. 	

S.	LEARNING	TUEODY	DD A OTIO A I
No.	OUTCOMES	THEORY	PRACTICAL
4.	Retrieve data using query	 Database query, Defining query, Query creation using wizard, Creation of query using design view, Editing a query, Applying criteria in query – single field, multiple fields, using wildcard, Performing calculations, Grouping of data, Structured Query Language (SQL). 	 Prepare a query for given criteria, Demonstrate to create query using wizard, and using design view, Edit a query, Demonstrate to apply various criteria in query – single field, multiple fields, using wild card, Performing calculations using query in Base, Demonstrate to group data, Use basic SQL commands,
5.	Create Forms and Reports using wizard	 Forms in Base, Creating form using wizard, Steps to create form using Form Wizard, Options to enter or remove data from forms Modifying form, Changing label, background, Searching record using Form, Inserting and deleting record using Form View, Concept of Report in Base, Creating Report using wizard, Steps to create Report using Wizard. 	 Illustrate the various steps to create Form using Form Wizard, Enter or remove data from Forms, Demonstrate to modify Forms, Demonstrate to change label, background, Search record using Form, Insert and delete record using Form View, Illustrate the various steps to create Report using Report Wizard, Demonstrate various examples of Report.

	UNIT 4: WEB APPLICATIONS AND SECURITY			
S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL	
1.	Working with Accessibility Options.	 Understand various types of impairment that impact computer usage Computer Accessibility Dialog box and its tabs Serial Keys 	 Illustrate use of various options under Computer Accessibility like Keyboard, mouse, sound, display setting serial keys, cursor options use of toggle keys, filter keys, sticky keys, sound sentry, show sounds etc. 	
2.	Understand Networking Fundamentals	 Network and its types. Client Server Architecture, Peer to-peer (P2P) Architecture, internet, World Wide Web, benefits of networking internet, getting access to internet, internet terminology Some of the commonly used Internet connectivity options Data transfer on the Internet 	 Identify applications of Internet comparing various internet technologies identifying types of networks and selecting internet 	
3.	Introduction to Instant Messaging	 learn key features of instant messaging Creating an instant messaging account Launching Google Talk Signing In into your Google Talk Account 	 Illustrate steps to create instant messaging account Signing In into your Google Talk Account 	
4.	Chatting with a Contact – Google Talk	 learn to chat with a contact that is already added to your contact list. sending text chat messages instantly by double-clicking on a contact. general rules and etiquettes to be followed while chatting. chatting on various types of messengers 	Illustrate chat with a contact and send messages, chatting with various messenger services	
5	Creating and Publishing Web Pages – Blog	 learn and appreciate a blog and its creation with the help of some blog providers set up title and other parameters in a blog posting comments using offline blog editors 	☐ Illustrate Blog Creation and setting various parameters in it	

S. No.	LEARNING OUTCOMES	THEORY	PRACTICAL
6	Using Offline Blog Editors	☐ Concept to create blogs using a blog application and publish the blog whenever internet	Demonstration on how to create blogs using a blog application offline.
		connectivity is available.	 posting messages in an offline application
			Publish the blog whenever internet connectivity is
			available using various examples
7	Online Transaction	 concept of e-commerce and various online applications importance of secure passwords 	 Illustration of online shopping using various ecommerce sites Demonstration of
			securing passwords for online transactions.
8.	Internet Security	 Need of internet security Cyber threats like phishing, email- 	illustration of internet security threats through various ways
		spoofing, char spoofing etc.best practices for internet security	cyber security tipstips for secure passwords
		and secure passwordsconcept of browser, cookies, backup, antivirus	 demonstration of strong passwords using various websites.
		clearing data in browsers	 clearing data stored in browser applications.
9.	Maintain workplace safety	 Basic safety rules to follow at workplace – Fire safety, Falls and slips, Electrical safety, Use of first aid. Case Studies of hazardous situations. 	 Practice to follow basic safety rules at workplace to prevent accidents and protect workers Fire safety, Falls and slips, Electrical safety, Use of first aid.
10.	Prevent Accidents and Emergencies	Accidents and emergency,Types of Accidents,	Illustrate to handle accidents at workplace,
	5	Handling AccidentsTypes of Emergencies.	Demonstrate to follow evacuation plan and procedure in case of an emergency.
11.	Protect Health and Safety at work	 Hazards and sources of hazards, General evacuation procedures, Healthy living. 	 Identify hazards and sources of hazards, identify the problems at workplace that could cause accidents, Practice the general evacuation
			procedures in case of an emergency.

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		
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 – Open Office, Google Suite 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 Technology OR Bachelor Degree in Computer Application/ 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.	 The candidate should have a minimum of 1 year of work experience in the same job role. S/He should be able to communicate in English and local language. S/He should have knowledge of equipment, tools, material, Safety, Health & Hygiene. 	 18-37 years (as on Jan. 01 (year)) Age relaxation to be provided as per Govt. rules

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:

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- 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;
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- Identify any additional support the student may need and help to make special arrangements for that support;
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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;

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