

SENIOR SCHOOL CURRICULUM 2018-19

Volume - I

Main Subjects for Classes XI-XII

CENTRAL BOARD OF SECONDARY EDUCATION

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1. PRINCIPLES OF THE CBSE CURRICULUM

The curriculum refers to the lessons and academic content to be taught to a learner in the 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, courses of study, subject-wise instructional objectives 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.

1.1 Salient Features of the CBSE Secondary School Curriculum

The Curriculum prescribed by CBSE strives to:

1. provide ample scope for physical, intellectual and social development of students;
2. enlist general and specific teaching and assessment objectives;
3. uphold Constitutional values such as socialism, secularism, democracy, republican character, justice, liberty, equality, fraternity, human dignity and the unity and integrity of the Nation by encouraging values-based learning activities;
4. nurture Life-Skills by prescribing curricular and co-curricular activities to help improve self-esteem, empathy towards others and different cultures etc.;
5. integrate innovations in pedagogy, knowledge and application, such as human sciences with technological innovations to keep pace with the global trends in various disciplines;
6. promote inclusive education by providing equal opportunities to all students;
7. integrate environmental education in various disciplines from classes I-XII;
8. equally emphasize Co-scholastic areas of Art Education and Health and Physical Education.

1.2 Objectives of the Curriculum

The Curriculum aims to:

1. achieve cognitive, affective and psychomotor excellence;
2. enhance self-awareness and explore innate potential;
3. promote Life Skills goal setting, decision making and lifelong learning;
4. inculcate values and foster cultural learning and international understanding in an interdependent society;
5. acquire the ability to utilize technology and information for the betterment of humankind;
6. strengthen knowledge and attitude related to livelihood skills;
7. develop the ability to appreciate art and showcase talents;
8. promote physical fitness, health and well-being.

1.3 Curriculum Areas at Senior Secondary Level

For the purpose of fostering competences in learners, the curriculum encompasses nine major learning areas, which are: Languages, Humanities, Mathematics, Science and Technology, General Studies, and Health and Physical Education. These areas are broadly divided into Scholastic and Co-scholastic areas as detailed below:

Languages	Scholastic Areas
Humanities	
Mathematics	
Science and Technology	
Commerce	
Visual, Performing and Fine Arts	
General Studies	Co-scholastic Areas
Health & Physical Education	

Scholastic Areas:-

The curriculum envisages individualized personal learning acumen and seeks to explore the potential of students in acquiring substantial knowledge and skills through academic rigors. With greater academic orientation and research skills in core academic areas, students would evolve as discerning young adults with a sense of real self-esteem having true values and principles. The scholastic areas are as follows:

- (i) **Languages** include Hindi, English and other 31 languages (detailed in Curriculum Volume II). 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.
- (ii) **Humanities** (Geography, History, Economics, Home Science, Sociology, Fine Arts, Political Science, Fashion Studies, and related subjects). Humanities include 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, in this regard, also understand their Fundamental Rights and Duties and behave responsibly. Learners learn to be tolerant and empathetic towards others through the study of this subject.
- (iii) **Science and Technology** (Subjects related to Biology, Chemistry, Physics, Computer Science Information Practices) include gaining knowledge about matter and energy, nature, the environment, technology,

breakthroughs in science. 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. This learning can be used to analyze, evaluate, synthesize and create. Learners understand and appreciate the physical, biological and technological world and acquire the knowledge and develop attitude, skills and values to make rational decisions in relation to it.

- (iv) **Mathematics** includes acquiring the concepts related to number sense, operation sense, computation, measurement, geometry, probability and statistics, the skill to calculate and organize, and the ability to apply this knowledge and acquired skills in their daily life. It also includes understanding of the principles of reasoning and problem solving. Learners identify, integrate and apply numerical and spatial concepts and techniques. They have clarity of concepts and are able to connect them to the real world. Learners rationalize and reason about pre-defined arrangements, norms and relationships in order to comprehend, decode, validate and develop relevant patterns.
- (v) **Commerce** (Business Studies, Accountancy, Entrepreneurship, Economics and related subjects) includes gaining understanding about core business disciplines like the exchange of items of value or products between persons or companies and any such exchange of money for a product, service, or information is considered a deal of commerce.
- (vi) **Visual, Performing and Fine Arts** (Dance, Drama, Music, Heritage Crafts, Graphic Design, Fine Arts, Sculpture and related subjects) aims to help learners cultivate an interest and appreciation for arts and encourage them to enthusiastically participate in related activities, thus, promoting abilities such as imagination, creativity, value arts, and the cultural heritage.

Co- Scholastic Areas:-

It is a well-known fact that only a healthy child can learn effectively and good health status leads to better learning. Many other activities are necessary for development of the affective and psychomotor domain. Those activities like games and sport, art and music, craft work etc. are termed as co-scholastic activities. Instead of co-curricular activities, the term co-scholastic activities are used as both cognitive and non-cognitive development can take place by exposing the child to the lesson on scholastic subjects and non-scholastic subjects. General Studies, Health and Physical education, yoga, traditional games, indigenous sports, NCC, Scouts and Guides, Martial Arts etc. will be integral part of the curriculum and would be in the routine of the schools for the holistic development of children as per the specific details given below:

- (vii) **General Studies** Kindly see the following URL for detailed Curriculum and Guidelines

[http://cbseacademic.nic.in/web_material/publication/curriculum/Final%20General%20Studies%20XI-XII%20\(%2006-07-2016\).pdf](http://cbseacademic.nic.in/web_material/publication/curriculum/Final%20General%20Studies%20XI-XII%20(%2006-07-2016).pdf)

- (viii) **Health and Physical Education** focuses on holistic development, both mental and physical, understanding the importance of physical fitness, health, well-being and the factors that contribute to them. Focus of this area is on helping learners 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 lifestyle choices. For activities kindly refer to Revised Health Manual Volume-4 available at <http://cbseacademic.nic.in/supportmaterial.html>

These eight learning areas are to be integrated with each other in terms of knowledge, skills (life and livelihood), comprehension, values and attitudes. Learners should get opportunities to think laterally, critically, identify opportunity, challenge their potential and be open to challenges. Learners value and engage in practices that promote physical, cognitive, emotional and social development and wellbeing. This enables learners to 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 throughout.

1.4 Implementation of the Curriculum

Schools have to setup a School Curriculum Committee with teachers representing each seven areas. 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, are gender sensitive, have valid content and do not contain any material which may hurt the sentiments of any community. It 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.

1.5 Pedagogical Practices by Teachers

The pedagogical practices should be learner centric. It is expected of a teacher to ensure an atmosphere for students to 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' rather attend to the individual difference of students by diagnosing and modifying their pedagogic planning.

Reflection:

- *Teaching should be in the conversational modes rather than in the modes of authoritarian monologue*
- *The teacher needs to draw the children and gain their confidence,*
- *Teachers should make deliberate attempts to explain the learning from utility of the textual material taught in school to real life.*

1.6 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;
- activities/experiments/hands-on-learning;
- Interdisciplinary Linkages and infusion of Core Skills (Life-skills, Values, Gender sensitivity etc.);
- Resources (including ICT);
- Feedback and Remedial Teaching Plan.

1.7 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; 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, Constitutional Values with emphasis on realization of Fundamental Duties may be incorporated depending upon context in almost all the subjects.

1.8 Rules regarding Admission and Examination

For Eligibility for Admission and Examination and Scheme of Examination and related information, kindly see the Examination Bye-Laws of CBSE available at the following URL

<http://www.cbse.nic.in/newsite/examinationbyelaws.html>

2. Scheme of Studies

2.1 Academic Stream

The learning areas will include:

I and II. Two Languages (Core/Elective) out of

Hindi, English, Assamese, Bengali, Gujarati, Kashmiri, Kannada, Marathi, Malayalam, Manipuri, Oriya, Punjabi, Sindhi, Tamil, ,Telugu, Urdu, Sanskrit, Arabic, Persian, Limboo, Lepcha, Bhutia, Mizo, Tangkhul, Bodo, Nepali, Tibetan, French, German, Russian and Spanish.

Notes:

1. Out of the languages, one shall be English or Hindi, both English and Hindi can also be offered simultaneously.
2. The languages may be offered either at Core/Elective level. The same language, however cannot be offered both at the Core level and Elective level.
3. A candidate has the freedom to offer, in lieu of one of the two languages above, any other elective subject provided under III below.

III to V. Three Electives out of the following:

Mathematics, Physics, Chemistry, Biology, Biotechnology, Engineering Graphics, Home Science, Economics, Political Science, History, Geography, Business Studies, Accountancy, Fine Arts, Agriculture, Computer Science/Informatics Practices, Sociology, Psychology, Physical Education, Music and Dance, Entrepreneurship, Knowledge Traditions and Practices of India, Legal Studies, National Cadet Corps. (In this regard please also refer to notes given below).

Note: 1. Candidate shall opt either for Computer Science or Informatics Practices.

VI. General Studies

VII. Health and Physical Education

Additional Subject: A candidate can also offer an additional elective which may either be a language at elective level (out of those mentioned above) or, any other elective subject. While transacting the Curriculum due emphasis should be laid on National Identity and Values Education. Schools are expected to draw their own programmes in this area in accordance with the guidelines contained in the relevant journals and manual published by the Board. Likewise, programmes in General Studies and Health and Physical Education be planned in accordance with the guidelines brought out by the Board.

In Regional Languages, the Board prescribes the textbooks being followed in classes XI and XII 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 academic 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

2.2 List of Vocational Courses

S. No.	Sub Code	Subject Name-XI (2017-18)	Subject Name -XII (2018-19)
1	604	Office Procedures & Practices	
2	607	Typography & Computer Application (English)	
3	609	Typography & Computer Application (Hindi)	
4	625	Applied Physics	
5	626	Applied Mechanics	Mechanical Engineering
6	628	Auto Shop Repair and Practice	
7	729	Food Nutrition & Dietetics	Basic Concepts of Health & Disease and Medical Terminology
8	740	Geospatial Technology	
9	743	Retail Operations	
10	746	Holistic Health	
11	747	Library Information & Society	Library Systems and Resource Management
12	750	Logistics Operations and Supply Chain Management	
13	756	Tourism Resources in India	Introduction to Hospitality Management
14	762	Basic Horticulture	
15	766	Business Operation & Administration	
16	772	Design & Innovation	
17	776	Garment Construction	
18	777	Elements of Textile Design	Traditional Indian Textile
19	780	Financial Accounting	
20	782	Taxation	
21	783	Marketing	
22	784	Salesmanship	
23	785	Banking	
24	787	Basic Electricity	Electrical Machines
25	786	Insurance	
26	789	Basic Electronics	Operation and maintenance of Communication devices
27	793	Foundation of Financial Market	Capital Market Operations
28	796	Web Applications	
29	797	Elements of Civil Engineering	Construction Technology
30	800	Security	

LIST OF CAREER ORIENTED VOCATIONAL COURSES OFFERED AT SENIOR SECONDARY LEVEL ACADEMIC YEAR 2017-18

S. No.	COURSE	XI (2017-18)	XII (2018-19)	COD E
Engineering and Technology				

1.	Automobile Technology	Auto Engineering		627	
		Auto Shop Repair and Practice		628	
		Optional #			
		Engineering Science		622	
2.	Civil Engineering	Elements of Civil Engineering	Construction Technology	797	
3.	Electrical Technology	Basic Electricity	Electrical Machines	787	
		Engineering Science	Electrical Appliances	788	
4.	Electronics Technology	Basic Electronics	Operation and maintenance of Communication devices	789	
		Digital Electronics	Troubleshooting and maintenance of Electronic Equipment	790	
5.	Geospatial Technology	Geospatial Technology		740	
6.	IT Application	IT Tools	Database Management Applications	795	
		Web Applications		796	
7.	Transport System & Logistic Management	Logistics Operation & Supply Chain Management	Transport System & Logistic Management	750	
Health and Wellness					
8.	Health and Beauty Studies	Beauty & Hair		745	
		Holistic Health		746	
9.	Medical Diagnostics	Anatomy & Physiology	Laboratory Medicine	741	
		Diagnostic Radiology	Clinical Biochemistry & Microbiology	742	
10.	Health Care Science	Food Nutrition & Dietetics	Basic Concepts of Health & Disease and Medical Terminology	729	
11.	Fashion Design & Garment Technology	Introduction to Fashion Industry	Basic Pattern Development	775	
		Garment Construction		776	
		Optional#			
		Elements of Design & Fashion	Fabric Study	774	
12.	Mass Media Studies & Production	Understanding the Evolution and Forms of Mass Media		738	
		The Creative and Commercial Process in Mass Media		739	
13.	Design & Innovation	Design and Innovation		772	
14.	Textile Design	Element of Textile Design	Traditional Indian Textile	777	
		Any one of the following #			
		Woven Textile	Printed Textile	778	
		Textile Science	Textile Chemical Processing	779	
15.	Horticulture	Basic Horticulture		762	
		Any one from the following			
		Olericulture		763	
		Pomology		764	
		Floriculture		765	
16.	Food Production	Food Production I	Food Production III	734	

		Food Production II	Food Production IV	735
17.	Food & Beverage Services This is two paper package and subject 736 and 737 are to be taken.	Food Service		736
		Beverage Services	Food and Beverage Cost and Control	737
18.	Travel and Tourism	Tourism Resources in India	Introduction to Hospitality Management	756
		Tourism Concepts & Practices	Travel Agency and Tour Operations Business	757
19.	Front Office Operation	Basis of Front Office	Front Office Operations	753
		Introduction to Tourism & Hotel Industry	Advanced Front Office Operations	754
20.	Security	Security		800
21.	Accountancy & Taxation #Accountancy (055) and Financial Accounting (780) can't be taken together	Cost Accounting		781
		Taxation		782
		Optional # Financial Accounting		780
22.	Banking & Insurance	Banking		785
		Insurance		786
23.	Business Administration	Business Operation & Administration		766
24.	Financial Market Management	Foundations of Financial Markets	Capital Market Operations	793
		Mutual Funds	Derivative Market Operations	794
		Optional # Financial Accounting		780
25.	Library Information & Society	Library Systems and Resource Management		747
	Library Classification & Cataloguing.	Information storage and Retrieval.		748
26.	Marketing & Salesmanship	Marketing		783
	Salesmanship	Salesmanship		784
27.	Office Secretaryship	Office Procedures and Practices		604
		Typography & Computer Application (English)		607
		OR		
		Typography & Computer Application (Hindi)		609
28.	Retail	Retail Operations		743
		Retail Services		744
29.	Stenography & Computer Application ENGLISH	Typography & Computer Application (English)		607
		Shorthand (English)		608
		Optional		
		Office Procedures and Practices		604
	Stenography & Computer Application HINDI Package of 2 subjects and both 609 and 610 are to be taken together.	Typography & Computer Application (Hindi)		609
		Shorthand (Hindi)		610
		Optional		
		Office Procedures and Practices		604

Vocational courses/electives can be offered along with Business Studies, Accountancy and other subject to the following stipulations:

- (i) These courses cannot be combined with the electives related to similar disciplines under the academic subjects in order to avoid duplication, e.g., Store Accounting (code no. 618) cannot be combined with Accountancy (code no. 055).
- (ii) If Stenography in Hindi or English is offered, it is obligatory to offer Hindi Typewriting or English Typewriting respectively as the case may be to make the combinations more meaningful. English Stenography, however, cannot be combined with Hindi Typewriting or corollary Hindi Stenography with English Typewriting.
- (iii) For detailed information, kindly see the curriculum of vocational courses

2.3 Medium of Instruction

The medium of instruction in general in all the schools affiliated with the board shall either be English or Hindi.