

**B.C.M. SCHOOL**  
**SYLLABUS OF CLASS XI Class**  
**MEDICAL & NON MEDICAL**

**EXAMINATION PATTERN (Session 2017-2018)**

<b>CONSOLIDATED RESULT</b>	
<b>Unit Test I (Weightage)</b>	<b>10 marks</b>
Maximum marks for each test will be 50. Test will be conducted in the month of July.	
<b>Mid Term (Weightage)</b>	<b>20 marks</b>
Maximum marks for each subject will be same as per CBSE pattern. Exam. will be conducted in the month of September.	
<b>Unit Test II (Weightage)</b>	<b>20 marks</b>
Maximum marks for each subject will be same as per CBSE pattern. Exam. will be conducted in the month of December.	
<b>Annual Exam. (Weightage)</b>	<b>50 marks</b>
Maximum marks for each subject will be same as per CBSE pattern. Exam. will be conducted in the month of February.	
<b>Total</b>	<b>100 marks</b>

**NOTE : Weekly tests will be conducted in the months not mentioned above.**

- PROMOTION POLICY :** (i) A student must secure at least 33% marks in Final Exam. and Consolidated result in all subjects to be eligible for promotion to next class.  
(ii) A student failing in two subjects will be considered fail.  
(iii) A student failing in one subject may be given one chance of Re-Test within one month time.

**General Instructions :**

1. It is mandatory for a student to appear in each of the examination.
2. In case of illness, medical certificate must be submitted **within a week of the day of examination** failing which the student will be assigned zero marks in the respective exam.
3. Minimum 75% attendance throughout the session is mandatory for a student to be eligible to appear in the Final Examination.



**ENGLISH**

<b>Month</b>	<b>Syllabus to be covered in :</b>
APRIL	Report/Writing, Tenses, Classified Advertisements, The Portrait of a Lady, A Photograph, Novel - The Canterville Ghost - Ch. 1, 2
MAY	Comprehension Passage, The Summer of the Beautiful White Horse, Novel - We are not afraid to die, Application for a Job, The Address Letter Writing Business / Official, Posters, Notices, Determiners, Narratives
JULY	I UNIT TEST
AUGUST	Ranga's Marriage, Albert Einstein At School, Novel - Ch. 3, 4, 5, Ch - 3 Discovering Tut : The Saga Continues Mother's Day, Note Making
SEPT.	Childhood, The Voice of the Rain HALF YEARLY (100 Marks)
OCTOBER	Clauses, The Ailing Planet, The Browning Version, Modals, Posters Novel : Chapter 6, 7
NOVEMBER	Father to Son, Birth, The Tale of Melon City
DECEMBER:	Revision UNIT TEST II (FLT)
JANUARY	REVISION
FEBRUARY	FINALS

Text Book : NCERT Physics

Ref. Book : New Simplified Physics - By S.L. Arora  
(Dhanpat Rai & Sons Publication)**PHYSICS**Practical Note Book : Fundamental Practical Note Book  
(Vijaya Publication)

Month	Syllabus to be covered in :
April	Unit 1 - Physical World & Measurement
May	Unit 2 - Kinematics....
June	SUMMER VACATION
July	UNIT TEST (50 Marks) Unit 2 - Kinematics (continued)
August	Unit 3 - Laws of Motion, Unit - 4 Work, Energy & Power Unit - 5 Motion of System of particles and rigid body
Sept.	Unit - 5 Continued, Half Yearly Examination (FLT) <div style="border: 1px solid black; padding: 2px; display: inline-block;">Syllabus - Unit 1, 2, 3, 4 &amp; 5</div>
Oct.	Unit 6 - Gravitation, Unit 7 - Properties of Bulk Matter
Nov.	Unit 8 - Thermodynamics Unit 9 - Behaviour of perfect gas & Kinetic theory of gases Class Test 2 : 25 Marks
Dec.	Unit 10 - Oscillations & Waves 2nd Unit Test (FLT) Syllabus : Unit 7, 8, 9
Jan.	Unit 10 - Oscillations & Waves (Contd.)
Feb.	Revision Work & Final Exams.

Text Book : N.C.E.R.T. (Chemistry)

**CHEMISTRY**

Month	Syllabus to be covered in :
April	Unit I : Some basic concepts of Chemistry Unit II : Structure of Atom.
May	Unit III : Classification of Elements and periodicity in properties
June	SUMMER VACATION
July	Unit Test - I
August	Unit IV : Chemical Bonding and Molecular Structure Unit VII : Equilibrium Unit VIII : Redox Reaction
September	Unit IV : Continue Half Yearly Examination Syllabus : Unit I, II, III, IV, VII, VIII
October	Unit X : S Block Element Unit XI : Organic Chemistry Unit XIII : Hydrocarbon
November	Unit VI : Thermodynamics Unit V : States of Matter - Gases and liquid Unit IX : Hydrogen

**CHEMISTRY**

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b>December</b>	Unit XI : p - Block Elements Unit Test II: Syllabus includes Units : XIII, X, VI, V, IX
<b>January</b>	Unit XIV : Environmental Chemistry
<b>February</b>	Revision work and Final Exams.

**BOOKS RECOMMENDED :**

(i) NCERT BOOK

**MATHEMATICS**

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b>APRIL</b>	Chapter - 1 Sets Chapter - 2 Relations and Functions (Chapter - 1 from reference book will also be covered)
<b>MAY</b>	Chapter - 3 Trigonometry (Chapters 7, 8, 9, 10 from book by R. D. Sharma)
<b>JULY</b>	Chapter - 4 Principle of Mathematical Induction
<b>AUGUST</b>	Chapter - 5 Complex Numbers & Quadratic Equations Chapter - 6 Linear Inequalities Chapter - 7 Permutations & Combination (Extra questions related to Complex Number & Quadratic Equations from book by R. D. Sharma)
<b>SEPT.</b>	Half Yearly Exam.

**MATHEMATICS**

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b>OCTOBER</b>	Chapter - 8 Binomial Theorem Chapter - 9 Sequences & Series (Special Sequences) Chapter - 10 Straight Lines
<b>NOVEMBER</b>	Chapter - 11 Conics Chapter - 12 Introduction to Three Dimensional Geometry Chapter - 13 Limits & Derivatives (Conics & Derivatives from reference book also)
<b>DECEMBER</b>	UNIT TEST (FLT)
<b>JANUARY</b>	Chapter - 14 Mathematical Reasoning Chapter - 15 Statistics Chapter - 16 Probability
<b>FEBRUARY</b>	Revision & Annual Exam



**BIOLOGY**

Text Book : N.C.E.R.T. (Biology)

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b>APRIL</b>	L - 1 Living World, L - 2 Biological classification, L - 3 Plant Kingdom
<b>MAY</b>	L - 5 Morphology of flowering plants, L - 6 Anatomy of Flowering Plant
<b>JULY</b>	UNIT TEST - (50 Marks) (L - 1, L - 2, L - 3, L- 5
<b>AUGUST</b>	L - 7 Structural organisation in animals. L - 8 Cell : The Unit of Life L - 9 Biomolecules
<b>SEPT.</b>	L - 10 Cell Cycle & Cell Division L - 11 Transport in Plants Half Yearly Examination (70 Marks) (L 1 - 10)
<b>OCTOBER</b>	L - 13 Photosynthesis L - 14 Respiration L - 15 Plant growth & Development

**BIOLOGY**

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b>NOV.</b>	L - 16 Digestion and Absorption. L - 17 Breathing and exchange of gases. L - 18 Body Fluids and Circulation
<b>DEC.</b>	L - 19 Excretory products and their elimination L - 20 Locomotion and Movement Full Length Test - 70 Marks
<b>JAN.</b>	L - 21 Neural Control and Co-ordination L - 22 Chemical Co-ordination and Integration L - 4 Animal Kingdom
<b>FEB.</b>	Revision & Final Examination - 70 Marks

## PHYSICAL EDUCATION

Month	Syllabus to be covered in :
<b>April - May (Ch. 1, 2)</b>	<p><b>Text Book : Swan Publication</b></p> <p><b>Unit -1 : Changing Trends and Career in Physical Education</b></p> <ul style="list-style-type: none"> <li>* Meaning &amp; definition of Physical Education</li> <li>* Aims &amp; Objectives of Physical Education</li> <li>* Changing trends in Physical Education</li> <li>* Various Physical Education Courses available in India</li> <li>* Career Options in Physical Education</li> <li>* Soft skills required for different careers</li> </ul> <p><b>Unit - II : Olympic Movement</b></p> <ul style="list-style-type: none"> <li>* Ancient and Modern Olympics (Summer &amp; Winter)</li> <li>* Olympic Symbols, Ideals, Objectives and Values</li> <li>* International Olympic Committee</li> <li>* Indian Olympic Association</li> <li>* Dronacharya Award, Arjuna Award and Rajiv Gandhi Khel Ratna Award</li> <li>* Organisational set-up of C.B.S.E. Sports and Chacha Nehru Sports Award</li> </ul>
<b>July</b>	UNIT TEST
<b>Aug. - Sept. (Ch. 3, 4, 5)</b>	<p><b>Unit - III : Physical Fitness, Wellness &amp; Lifestyle</b></p> <ul style="list-style-type: none"> <li>* Meaning &amp; Importance of Physical Fitness, Wellness &amp; Lifestyle</li> <li>* Components of physical fitness</li> <li>* Components of Health related fitness.</li> <li>* Components of wellness</li> <li>* Preventing Health Threats Through Lifestyle Change</li> <li>* Concept of Positive Lifestyle</li> </ul>

## PHYSICAL EDUCATION

Month	Syllabus to be covered in :
Sept.	<p><b>UNIT - IV : Physical Education &amp; Sports for Differently Abled</b></p> <ul style="list-style-type: none"> <li>* Aims &amp; objectives of Adaptive Physical Education</li> <li>* Organization promoting Adaptive Sports (Special Olympic Bharat; Paralympics; Deaflympics)</li> <li>* Concept and need of Integrated Physical Education</li> <li>* Concept of Inclusion, its need and Implementation</li> <li>* Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist &amp; Special Educator)</li> </ul> <p><b>UNIT - V : Yoga</b></p> <ul style="list-style-type: none"> <li>* Meaning &amp; Importance of Yoga</li> <li>* Elements of Yoga</li> <li>* Introduction - Asanas, Pranyam, Meditation &amp; Yogic Kriyas</li> <li>* Yoga for concentration &amp; related Asanas (Sukhasana; Tadasana; Padmasana &amp; Shashankasana)</li> <li>* Relaxation Techniques for improving concentration - Yog-nidra</li> </ul> <p style="text-align: center;"><b>HALF YEARLY</b></p>
Oct. - Nov. (Ch. 6, 7, 8, 9, 10)	<p><b>UNIT - VI : Physical Activity &amp; Leadership Training</b></p> <ul style="list-style-type: none"> <li>* Introduction to physical activity &amp; leadership</li> <li>* Qualities &amp; role of a Leader</li> <li>* Behaviour change stages for physical activity (Pre-contemplation; Contemplation; Planning; Active; Maintenance)</li> <li>* Creating leaders through Physical Education</li> <li>* Meaning, objectives &amp; types of Adventure Sports (Rock Climbing, Tracking, River Rafting, Mountaineering, Surfing and Para Gliding)</li> <li>* Safety measures during physical activity and adventure sports</li> </ul>

**PHYSICAL EDUCATION**

Month	Syllabus to be covered in :
	<p><b>UNIT -VII : Test and Measurement in Sports</b></p> <ul style="list-style-type: none"> <li>* Define Test , Measurement and Evaluation</li> <li>* Importance of Test and Measurement &amp; Evaluation in Sports</li> <li>* Calculation of BMI and Waist-Hip Ratio</li> <li>* Somato Types (Endomorphy, Mesomorphy and Ectomorphy)</li> <li>* Precedures of Anthropometric Measurement - Height, Weight, Arm and Leg length</li> </ul> <p><b>UNIT - VIII : Fundamentals of Anatomy and Physiology</b></p> <ul style="list-style-type: none"> <li>* Define Anatomy, Physiology and Its importance</li> <li>* Function of Skeleton System, Classification of Bones and Types of Joints</li> <li>* Properties of Muscles</li> <li>* Function and Structure of Muscles</li> <li>* Function and Structure of Respiratory System, Mechanism of Respiration</li> <li>* Structure of Heart and Introduction of Circulatory System</li> <li>* Oxygen Debt, Second Wind</li> </ul> <p><b>UNIT - IX : Kinesiology, Biomechanics &amp; Sports</b></p> <ul style="list-style-type: none"> <li>* Meaning &amp; Importance of Kinesiology &amp; Biomechanics in Phy. Edu. &amp; Sports</li> <li>* Levers &amp; Its Types and its application in sports</li> <li>* Equilibrium - Dynamic &amp; Static And Centre of Gravity and its application in sports</li> </ul>

## PHYSICAL EDUCATION

Month	Syllabus to be covered in :
<b>DEC. (Ch. 11)</b>	<ul style="list-style-type: none"> <li>* Force - Centrifugat &amp; Centripetal and its application in sports</li> <li>* Introduction to Buoyancy Force</li> </ul> <p><b>UNIT - X : Psychology and Sports</b></p> <ul style="list-style-type: none"> <li>* Definition and Importance of Psychology in Physical Education and Sports</li> <li>* Define and Differentiate between Growth and Development</li> <li>* Developmental Characteristics at Different Stage of Development</li> <li>* Adolescent Problems and their Management</li> <li>* Define Learning, Laws of Learning (Law of Readiness; Law of effect &amp; Law of Exercise) &amp; Transfer of Learning.</li> <li>* Plateau &amp; causes of plateau</li> <li>* Emotion : Concept, Type &amp; Controlling of emotion</li> </ul> <p><b>UNIT - XI : Training in Sports</b></p> <ul style="list-style-type: none"> <li>* Meaning &amp; Concept of Sports Training</li> <li>* Principles of Sports Training</li> <li>* Warming up and Limbering down</li> <li>* Load, Symptoms of Over-load, Adaptation &amp; Recovery</li> <li>* Skill, Technique &amp; Style</li> <li>* Role of Free-play in the development of Motor Component.</li> </ul> <p style="text-align: center;">&amp; UNIT TEST</p>

## PHYSICAL EDUCATION

Month	Syllabus to be covered in :
JAN.	<b>UNIT - XII : Doping</b> <ul style="list-style-type: none"><li>* Concept &amp; classification of doping.</li><li>* Prohibited Substances &amp; methods</li><li>* Athletes Responsibilities</li><li>* Side Effects of Prohibited Substances</li><li>* Ergogenic aids and doping in sports</li><li>* Doping control procedure</li></ul>
FEB.	REVISION & FINAL EXAM.

## COMPUTER SCIENCE

Month	Syllabus to be covered in :	Month	Syllabus to be covered in :
	<b>TEXT BOOK : COMPUTER SCIENCE with C++ Vol. I &amp; II By SUMITA ARORA</b>		
<b>April</b>	Getting started with C++,/ Data Handling	<b>Nov.</b>	Array & Structure
<b>May</b>	Operators & Expressions in C++ / Working with OS	<b>Dec.</b>	UNIT TEST - II (FLT) Data Representation, General OOP concpets
<b>June</b>	Summer Vacations	<b>Jan.</b>	Computer Overview & REVISION
<b>July</b>	UNIT TEST Flow of Control (if and its types) / Input Output Memory Devices	<b>Feb.</b>	REVISION & FINAL EXAM.
<b>August</b>	Flow of Control (Looping) / Programming Methodology		
<b>Sept.</b>	Functions (Half) - (Built Infuction)  HALF YEARLY		
<b>Oct.</b>	Functions (complete) (Uses defined function)		



BOOK : Informatics Practices by NCERT      Informatics Practices  
 Informatics Practices by Sunita Arora

Month	Syllabus to be covered in :
<b>April :</b>	Introduction Unit - 3 Relational Database Management System Ch 12 - Relational Database Concepts Ch 13 - Introduction to MySQL
<b>May :</b>	Ch 14 - Classification of SQL Statement: Creating and using a database : Creating a table, Displaying table data using predicates and other queries.
<b>June :</b>	Summer Vacation
<b>July :</b>	Revision of DBMS Ch. 15, 16 - Functions in MySQL UNIT TEST - I
<b>August :</b>	Unit 1 : Introduction to Computer System Ch 1,2 - Hardware Concepts : Computer system organization basic concepts, Input devices, Output devices, Memory, Security of computer system and Software Concepts : Types
<b>Sept. :</b>	Revision Unit 2 : Introduction to Programming Ch 11 - Programming Guidelines & Program Development Life Cycle HALF YEARLY EXAM.

**Informatics Practices**

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b>Oct. :</b>	Ch 5 - Application programming using Control Structures Decision Structures and applications in IDE.
<b>Nov. :</b>	Ch 6, 7, 8 JAVA IDE Programming - I, II, III Ch. - 3, 4 : Introduction to Java Language
<b>Dec. :</b>	Unit 4 : APPLICATIONS Ch 17 - e- Governance. e - Business, e - Learning UNIT TEST - II (FLT)
<b>Jan. :</b>	Programming using IDE Programming Fundamental, Data Types Revision
<b>Feb.</b>	Revision Final Practical : Evaluation of Practical Examination 1. Problem Solving using Java    2. SQL Queries 3. Practical Record File    4. Presentation (Group of 3-4 students) 5. Viva Voce ANNUAL EXAMINATION

**FINE ARTS**

<b>Month</b>	<b>Syllabus to be covered in :</b>
	<p><b>BOOK NAME : PANORAMIC INDIAN PAINTING</b>  <b>PUBLICATION : VISHAL PUBLISHING CO.</b></p>
<b>APRIL :</b>	<p>Theory :            *An Introduction of Art              I - The elements and principles of Art              II - Art Appreciation            * Pre-Historic Rock Paintings            Practicals :              Still Life : Study of two or three natural and geometric forms                              in pencil with light and shade from a fixed point of                              view.</p>
<b>MAY :</b>	<p>Theory :              Art of Indus Valley Civilization            Practicals :              Still Life in any medium (water / pastel / Tempura / Acrylic)</p>
<b>July :</b>	UNIT TEST - I
<b>August</b>	<p>Theory :              General Introduction of Art during Mauryan, Shunga, Kushana and Gupta Period.              Class Test - 25 Marks            Practicals :              Landscapes and compositions              in primary and secondary colours.</p>

Month	Syllabus to be covered in :
Sept.:-	Half Yearly Exams.
Oct. :-	Theory : Art of Ajanta Practicals : Imaginative Sketches / painting based on subjects from life and nature in any medium.
Nov. :	Theory : Temple Sculptures, Bronzes and Indo-Islamic Architecture Practicals : Sketches from Nature in Pencil shading. Class Test - 25 Marks
Dec. :-	Revision Unit Test - II (FLT) Practicals : Sketches from nature in any media.
Jan. :-	Revision & Exams.

**MUSIC VOCAL (Hindustani)**

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b><u>April</u></b>	Theory : Definition of the following : Swar Sangeet, Dhawani, Life Sketch of Tansen Ji Practical : Raag Bihaag, Taal-Dadra, Kehrwā.
<b><u>May</u></b>	Theory : Saptak, Naad, Shruti, Pt. Vishnu Naryan Bhatkhande Practical : Raag Bhupali, Taal- Teen Taal.
<b><u>July</u></b>	I UNIT TEST
<b><u>August</u></b>	Theory : That, Jati, Brief History of Khayal. Practical - Devotional Song, Brief History of Dhrupad
<b><u>September</u></b>	Half Yearly Examination
<b><u>October</u></b>	Theory : Raag, Swar - malika. Practical : Char Taal, Vilambit Khayal
<b><u>November</u></b>	Theory - Definition - Nibadh Gaan, Anibadh Gaan Life Sketch - Pt. Vishnu Digambar Pluskar Practical - Raag Jaunpuri, One Dharupad, Ek Taal.

**MUSIC VOCAL (Hindustani)**

<b>Month</b>	<b>Syllabus to be covered in :</b>
<b><u>December</u></b>	Tarana, Gharana, Music in Natya Shastra
<b><u>January</u></b>	Revision & Final Exams.

**HOME SCIENCE**

Month	Syllabus to be covered in :	
	<b>Text Book W. Pub. - HOME SCIENCE</b> <b>Saraswati : Textbook of Home Science</b>	
<b>Month</b>	<b>Theory</b>	<b>Practical</b>
April	<ul style="list-style-type: none"> <li>* Concept of Home Science and its scope.</li> <li>* Human Development : Life Span Approach</li> <li>- Aspects of Development from birth till childhood</li> </ul>	<ul style="list-style-type: none"> <li>* Interview working mothers to find out their arrangements for children in their absence.</li> </ul>
May	<ul style="list-style-type: none"> <li>* Protection from preventable diseases.</li> <li>- Substitute child care.</li> <li>- Managing emergencies.</li> </ul>	
July	<ul style="list-style-type: none"> <li>* Family and Community Resources.</li> <li>- Concept of resources and community resources.</li> <li>- Management process and Decision making.</li> </ul>	<ul style="list-style-type: none"> <li>* Floor decoration</li> <li>Project - preparing one accessory for decoration or Educational game</li> </ul>
August	<ul style="list-style-type: none"> <li>- Organisation of Time and Energy.</li> <li>- Organisation of Space and Work.</li> </ul>	<ul style="list-style-type: none"> <li>* Cleaning and polishing brass, aluminium, iron &amp; plastic.</li> </ul>

**HOME SCIENCE**

Month	Syllabus to be covered in :
August	<ul style="list-style-type: none"> <li>* Fabric and Apparel.</li> <li>- An introduction to fibre science.</li> <li>- Fabric Construction.</li> <li>- Fabric Finishes.</li> </ul>
September	<ul style="list-style-type: none"> <li>* Fabric finishes.</li> <li>* Food, Nutrition, Health and Fitness.</li> <li>- Functions of food.</li> <li>- Selection of food for optimum nutrition and Good Health.</li> </ul>
October	<ul style="list-style-type: none"> <li>- Maximising Nutritive Value of Food by Proper selection, Preparation and Storage. (BRITISH COUNCIL ISA PROJECT)</li> </ul>
November	<ul style="list-style-type: none"> <li>* Community Development and Extension</li> <li>- DWCRA, MNREGA, Communication.</li> <li>- Keeping community resources clean.</li> </ul>
December	Revision                      UNIT TEST - II (FLT)
January	Revision and Class Test
February	Final Exams