



COLUMBIA FOUNDATION SCHOOL

D – Block, Vikas Puri, New Delhi - 110018

SYLLABUS : (2018-19)

Class – XI

FEATURES & GUIDELINES

Complexity / Difficulty Level		
Level	Description	Notes
1	High (H)	Topic needs more attention
2	Medium (M)	Needs moderate attention
3	Easy (L)	Simple topic

- High Level of Difficulty implies more practice and parental guidance towards the topic.
- Classes for subjects like computer, Moral Science, General Knowledge, Drawing and Music are conducted once a week. Hence, the schedule is planned accordingly.
- In English, we have categorized the skills such as Reading, Writing, Vocabulary, Grammar, Speaking, and listening so that the child has a holistic approach towards the language.
- All the activities are relevant to the topic and are planned based on its difficulty level.
- Group activities will instill qualities such as teamwork, sharing and respecting others' opinion among the students.
- Most of the activities help to bridge the gap between theory and practical connecting the students to real life processes.
- Constant recapitulation of the topics helps in proper comprehension and retention of the concepts.
- All the activities in mathematics are designed to erase off fear from the minds of the learners towards the subject.
- Please refer to the syllabus before contacting us for any queries related to the syllabus.

ENGLISH

UT	Month	Book	Topic	Grammar/Writing
I	April	Hornbill Snapshots	<ul style="list-style-type: none"> • The Portrait of a Lady • A Photograph 	Determiners Article
	May	Hornbill Snapshots Hornbill	<ul style="list-style-type: none"> • The Summer of a Beautiful White Horse • The Address • Discovering Tut 	Active-Passive Voice Tenses Letter to Editor
II	July	Hornbill Snapshots	<ul style="list-style-type: none"> • The Voice of the Rain • Ranga's Marriage • The Ghat of only World 	Business Letters- Enquiry
	Aug.	Hornbill	<ul style="list-style-type: none"> • Albert Einstein at School • We are not afraid to die • Adventure 	Business Letters-Reply & Placing Orders
H.Y. Exam	Sept.	Hornbill	<ul style="list-style-type: none"> • The Ailing Planet • Laburuim Top 	Report Writing Sub-Verb Agreement
III	Oct.	Hornbill Snapshots	<ul style="list-style-type: none"> • Childhood • Mother's Day • Silk Road 	Factual Description
	Nov.	Hornbill Snapshots	<ul style="list-style-type: none"> • The Browning Version • Father to Son • The Tale of Melon City 	Editing Jumbled Words
IV	Dec.	Snapshots	• Birth	Practice Work
	Jan	_____		Revision
	Feb.	Final Exam		

MATHEMATICS

Books : NCERT (RD Sharma)

UT	Months	Topic
I	April	Ch-1 Sets Ch- Relations & Functions CH-3 Trigonometric Functions
	May	Ch-4 Principle of Mathematical Induction Revision
II	July	Ch-5 Complex Numbers and Quadratic Equations CH-6 Linear Inequalities Revision
	Aug.	Ch-7 Permutations & Combinations Revision
H.Y. Exam	Sept.	Ch-8 Binomial Theorem Ch-9 Sequences and Series
III	Oct.	Ch-10 Straight Lines Ch-11 Conic Section & Revision
	Nov.	Ch-12 Introduction of Three Dimensional Geometry
IV	Dec.	Ch-13 Limits and Derivatives Ch-15 Statistics
	Jan.	Ch-16 Probabilities
	Feb.	(Final Exam.)

PHYSICS I

Book: NCERT

UT	Month	Topic	Practical
I	Apr.	Physical world & Measurement	—
	May	Kinematics	—
II	June	Work, Power & Energy	—
	July	Laws of Motion	Experiment No.1 st , 2 nd
	Aug.	Motion of System of Particles and Rigid Body	Expt. No. 4 th , 5 th , 6 th
H.Y. Exam.	Sep.	Gravitation	Expt. No. 7 th & 8 th
III	Oct.	Properties of Bulk Matter	Expt. No. 7 th & 8 th
	Nov.	Thermodynamics	—
IV	Dec.	Waves	—
	Jan.	Oscillations	—
	Feb.	Ray Optics & Final Exam.	

CHEMISTRY

Book: NCERT

UT	Month	Topic	Practical
I	Apr.	Ch.-1: Some Basic Concept of Chemistry	• Analysis of functional group.
	May	Ch.-2: Atomic Structure Ch.-3: Environmental Chemical	• Analysis of functional group • Chromatography
II	July	Ch.-4: Periodic + Chemical Bonds	• Preparation of sol. • Volumetric Analysis
	Aug.	Ch.-5: Red ox + Thermodynamics	• Volumetric Analysis
H.Y. Exam.	Sep.	Ch.-6: Equilibrium + S Block	• Volumetric Analysis Titration • Salt Analysis
III	Oct.	Ch.7: States of Matters Ch.-8: Hydrogen	• Salt Analysis
	Nov.	Ch.-10: P Block	Salt Analysis Practice
	Dec.	Ch.-11: Some Basic Concept of Organic Compound	-
IV	Jan.	Ch.-12: Hydrocarbon	-
	Feb.	Final Exam.	

BIOLOGY

Book: NCERT

UT	Month	Topic	Practical
I	April	Ch-1 The Living World Ch-2 Biological Classification Ch-3 Plant Kingdom Ch-4 Animal Kingdom.	Expt. No. 1&2
	May	Ch-5 Morphology of Flowering Plants Ch-6 Anatomy of Flowering Plants Ch-8 all -The Unit of Life	Expt. No. 3,4&5
II	July	Ch-10 Cell cycle and cell division Ch-11 Transport in plant Ch-12 Mineral nutrition Ch-13 Photosynthesis in Higher Plants	Expt. No.6,7,8,9&10
	Aug.	Ch-14 Respiration in Plants Ch-15 Plant Growth & Development	Expt. No. 11&12
H.Y. Exam	Sept.	Ch-16 Digestion & Absorption Ch-17 Breathing & Exchange of Gases	-
	Oct.	Ch-18 Body Fluids and Circulation Ch-19 Excretory Products and their Elimination	-
III	Nov.	Ch-20 Locomotion & Movement	-
	Oct.	Ch-7 Structural Organisation in Animals	-
	Dec.	Ch-9 Biomolecules Ch-21 Neural Control & Coordination	-
IV	Jan.	Ch-22 Chemical Coordination and Integration.	-
	Feb.	Final Exam.	

BUSINESS STUDIES

Book: Poonam Gandhi /G.S. Alag / NCRT

UT	Month	Topic	Activities
I	March	Ch-1 Nature and Purpose of Business History of Commerce in India	-
	April	Continuation of chapter 1	-
		Ch-2 Forms of Business Organization	Case study
	May	Continuation of chapter 2.	Project work
II	June	Ch-3 Public, Private and Global Enterprise.	-
	July	Ch-4 Business Services. Ch-5 Emerging Modes of Business.	-
	Aug.	Ch-6 Social Responsibility of Business and Business ethics Ch-7 Formation of Company	Presentation
H.Y. Exam	Sept.	Ch-8 Sources of Business Finance	-
III	Oct.	Continuation of Chapter 8 Ch-9 Small Business	-
	Nov.	Ch-10 Internal Trade	Role play
	Dec.	Continuation of chapter 10	-
IV	Jan.	Ch-11 International Business.	-
	Feb.	Revision. - (Final Exam.)	-

ECONOMICS

UT	Month	Books	Topics
I	April	Micro Economics Sandeep Garg	Unit–1 Introduction of Micro Economics
	May	Micro Economics Sandeep Garg	Unit- II Consumer Behaviour and Demand
	July	Stats (N.M.Shah)	Ch-4 Economics Reforms since 1991 Ch-1 What is Economics Ch-2 Introduction Meaning & Scope Ch-3 Collection of Primary & Secondary Data Ch-4 Organization of Data
II	Aug.	Stats (N.M. Shah)	Ch-5 Tabular Presentation Ch-6 Diagrammatic Presentation Ch-7 Graphic Presentation
	Sept.	Micro Economics Sandeep Garg	Unit – III Producer Behaviour & Supply
H.Y. Exam	Oct.	Micro Economics Sandeep Garg	Unit – IV Market
III	Nov.	Micro Economics Sandeep Garg	Unit – IV Price Determination
	Dec.	Stats (N.M. Shah)	Ch-8 Measures of Central Tendency Ch-9 Positional Average & Partition Values Ch-10 Measures of Dispersion
IV	Jan.	Stats (N.M. Shah)	Ch-11 Correlation Ch-12 Index Number
	Feb.	Final Exam.	

ENTREPRENEURSHIP

Book: NCRT

UT	Month	Topic	Activity
I	April	Ch-1 Entrepreneurship Concept & Function	–
	May	Ch-2 An Entrepreneur	
	July	Ch-3 Entrepreneurship Journey	
	Aug.	Ch-4 Entrepreneurial Innovation & Problem Solving	
II	Sept.	Ch-5 Concept of Market	
	Oct.	Ch-6 Business Finance & Arithmetic	Learn to Earn
H.Y. Exam	Nov.	Ch-7 Resource Mobilization	
III	Dec.	Ch-12 Project Work Revision	
	Jan.	Revisions	
IV	Feb.	Final Exam.	

ACCOUNTANCY

Book: T.S. Garewal

UT	Month	Topic
I	April	Ch-1 Introduction Ch-2 Basic Accounting Term Ch-5 Accounting Equation
	May	Ch-3 Accounting Standards and Concepts Ch-4 Basis of Accounting Ch-6 Rules of Debit & Credit
II	July	Ch-8 Journal & Ledger Ch-7 Accounting Vouchers Ch-9 Cash Book
	Aug.	Ch-10 Special Purpose Book-Other Book Ch-12 Bank Reconciliation Statement Ch-11 Trial Balance
H.Y. Exam	Sept.	Ch-16 Rectification of Errors
III	Oct.	Ch-13 Depreciation Ch-14 Reserves & Provision Ch-15 Bill of Exchange
	Nov.	Ch-17 Financial Statement-I without Adjustments Ch-18 Financial Statement-II with Adjustments
IV	Dec.	Ch-18 Financial Statement –II with Adjustments
	Jan.	Ch-20 Single Entry System
	Feb.	Revision – (Final Exam.)

ENGINEERING GRAPHICS

Book : Modern Engineering Graphics – II

UT	Month	Topic	Activity
I	Apr.	Lines & Angle	Work Book
	May & June	Triangle Quadrilateral Polygons	Work Book
II	July	Circles Orthographic Projections	Prepare Solids
	Aug.	Projections of Solids	Use of Coral Draw
H.Y. Exam	Sept.	Solids in 5 Positions Section of Solids	Plate 1, 2 & 3
III	Oct.	Plan views of class room building kitchen, Bedroom etc.	Plate 4, 5 & 6
	Nov.	Views from 3D to 2D	Plate 7, 8 9 & 10
IV	Dec.	Isometric Scale & Views of Solids	Introduction to coral draw on computers
	Jan.	3D Blocks & Missing Views	Plate 11, 12, 13, 14 & 15
F. Exam	Feb.	-	-

INFORMATICS PRACTICES

Book: Book Published by CBSE, Notes & Assignment

UT	Month	Topic	Activity
I	Apr.	Ch.- 1 H/W concepts Ch.- 2 S/W concepts & productivity	Presentation based on basic computers, H/W & S/W
	May	Ch.- 3 Information security	Presentation based on Security system
II	July	Ch.- 8 Introduction to MySQL Ch.-9 MySQL	Practical on MYSQL
	Aug.	Ch.-10 functions in MySQL	Practical on MYSQL
H.Y. Exam.	Sep.	Ch.- 4 Getting Started with Java IDE, Programming	Practical File Submission for MYSQL Commands Dt. 10 Sep., 2017
III	Oct.	Ch.- 5 Programming Fundamentals Ch.- 6 Flow of Control	Practical on Net Beans IDE
	Nov.	Ch.- 6 contd.	Practical's on Net Beans IDE
	Dec.	Ch.- 6 contd. Ch.- 7 Programming Guidelines	Practical's on Net Beans IDE
IV	Jan.	Revision of complete syllabus	Submission of complete practical file 15th Jan.18
	Feb	Final Exam.	

COMPUTER SCIENCE

Book : C++ by Sumita Arora, Notes & Assignment

UT	Month	Topic	Practical
I	April	Ch.-1 Computer Overview Ch.-2 Working with OS Ch.-15 Data Representation Ch.-16 I/O Memory Devices	Presentation based on working of computer, I/O devices, types of memory
	May	Ch.-3 General OOP Concepts Ch.-7 Algorithms/Flow Chart	Presentation based on number system and algorithms
II	July	Ch.-4 Getting started with C++ Ch.-5 Data Handling Ch.-6 Operators & expression	—
	Aug.	Ch.-8 Flow of control	Practical related to simple C++ programs
H.Y. Exam.	Sept.	Revision Ch.-14 Event Programming Ch.- 13 Programming methodology	Practical of C++ programs
III	Oct.	Ch.-9 Console I/O operations Ch.-12 Standard Header files	Submission of Program file till control structures
	Nov.	Ch.- 10 Structured data type – Array	—
IV	Dec.	Ch.-11 Functions Ch.- 17 Structures	Practical work
	Jan.	Revision Ch-17, Structures (Contd.)	Submission of Program file
F.Exam	Feb.	Revision of complete syllabus	—

PHYSICAL EDUCATION

U.T.	Month	Topic	Activity
I	April	Changing Trends & Career in Physical Education <ul style="list-style-type: none"> • Define Physical Education, its Aims & Objectives • Development of Physical Education - Post Independence • Concept and Principles of Integrated Physical Education • Concept & Principles of Adaptive Physical Education Career Options in Physical Education	
II	May & July	Olympic Movement <ul style="list-style-type: none"> • Ancient and Modern Olympics • Olympic Symbols, Ideals, Objectives & Values • International Olympic Committee • Indian Olympic Association • Dronacharya Award, Arjuna Award and Rajiv Gandhi Khel Ratna Award • Organizational set-up of CBSE Sports & Chacha Nehru Sports Award 	Health and Fitness Activities - Medicine Ball/Thera Tube/Pilates/Rope Skipping
		Physical Fitness, Wellness & Lifestyle <ul style="list-style-type: none"> • Meaning and importance of Physical Fitness, Wellness and Lifestyle • Factors affecting Physical Fitness and Wellness • Indicators of Health - Physical and Psychological • Preventing Health Threats through Lifestyle Change • Components of Positive Lifestyle Physical Education & Sports for Differently Abled <ul style="list-style-type: none"> • Aims & Objectives of Adaptive Physical Education • Organisation promoting Adaptive Sports (Spl. Olympics Bharat; Paralympics; Deaflympics) • Concept of Inclusion, its need & Implementation • Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist & special Educator) 	
	Aug.	Yoga <ul style="list-style-type: none"> • Meaning and Importance of Yoga • Elements of Yoga • Introduction to - Asanas, Pranayam, Meditation and Yogic Kriyas • Yoga for concentration & related Asanas (Sukhasana, Tadasana; Padmasana & Shashankasna) 	Asanas

		<ul style="list-style-type: none"> • Relaxation Techniques for improving concentration - Yog-nidra 	
	Sept.	Physical Activity & Leadership Training <ul style="list-style-type: none"> • Introduction to Physical Activity & Leadership • Qualities & role of leader • Behaviour change stages for physical activity (Pre-contemplation; Contemplation Planning; Active Maintenance) • Creating leader through Physical Education • Meaning objectives and types of Adventure Sports (Rock Climbing, Tracking, River Rafting, Mountaineering, Surfing & Para Gliding) • Safety measures during physical activity and adventure sports 	Athletics - Sprints
H.Y. Exam		Test, Measurement & Evaluation <ul style="list-style-type: none"> • Define Test, Measurement & Evaluation • Importance of Test and Measurement Evaluation in Sports • Calculation of BMI & Waist - Hip Ratio • Somato Types (Endomorphy, Mesomorphy and Ectomorphy) • Procedures of Anthropometric Measurement - Height, Weight, Arm & Leg Length 	
III	Oct.	Fundamentals of Anatomy & Physiology <ul style="list-style-type: none"> • Define Anatomy, Physiology and its importance • Function of skeleton system, Classification of bones & types of joints • Properties of muscles • Function and structure of muscles • Function and structure of Respiratory System, Mechanism of Respiration • Structure of Heart and introduction to Circulatory System • Oxygen debt, second wind 	Athletics - Jumps
	Nov.	Kinesiology, Biomechanics & Sports <ul style="list-style-type: none"> • Meaning and Importance of Kinesiology Biomechanics in Physical Edu. & Sports • Levers & its Types & its application in sports • Newton's Law of Motion and its application in sports • Equilibrium - Dynamic & Static & Centre of Gravity and its application in sports 	Taekwondo/Judo

		<ul style="list-style-type: none"> • Force - Centrifugal and Centripetal and its application in Sports • Introduction to Buoyancy Force 	
IV	Dec.	Psychology and Sports <ul style="list-style-type: none"> • Definition & importance of Psychology in Physical Education & Sports • Define and differentiate between Growth and Development • Developmental characteristics at different stage of development • Adolescent problems and their management • Define Learning, Laws of Learning and transfer of Learning • Plateau & causes of plateau • Emotion; concept, Type & Controlling emotion 	Badminton/ Table Tennis
	Jan.	Training in Sports <ul style="list-style-type: none"> • Meaning & Concept of Sports Training • Principles of Sports Training • Warming up and limbering down • Load, Symptoms of Overload, Adaptation and Recovery • Skill, Technique and Style • Symptoms of Overload and How to Overcome it • Role of Free play in the developments of Motor Component Doping <ul style="list-style-type: none"> • Meaning and types of Doping • Prohibited substances and methods • Athletes responsibilities • Testing - in competition and Out-of-Competition • Side effects of prohibited substances • Ergogenic aids & doping in sports • Doping control procedure 	