DELHI PUBLIC SCHOOL, GANDHINAGAR
REVISED SYLLABUS 2021-22
CLASS XI-SCIENCE

SUBJECT: ENGLISH

MONTH	MAIN COURSE BOOK (Hornbill)	SUPPLEMENTARY READER (Snapshots)	ADVANCED WRITING SKILLS	GRAMMAR	ACTIVITY
June			Notice Writing	Tenses	
July	1. The Portrait of a Lady (Prose) 2. A Photograph 3. The Laburnum Top (Poem)	1. The Summer of the Beautiful White Horse 2. The Address (Prose)		Determiners	
August	4. We're not Afraid to Die... (Prose) 5. Discovering Tut (Prose)		Letter of Enquiry Letter of Placing Orders		Listening & Speaking Skills (ASL)
Syllabus for Periodic Test-1 **Reading:** Reading Comprehension. **Writing Skills and Grammar:** Notice Writing, Integrated Grammar **Literature and Long Writing:** The Portrait of a Lady (Prose), A Photograph (Poem), The Laburnum Top (Poem) , The Summer of the Beautiful White Horse (Prose), The Address (Prose).					
September	6. Landscape of the soul (Prose)	3. Ranga's Marriage	Letter of Complaints Speech Writing	Reordering/ transformation of sentence	

Syllabus for Term-I Examination

Reading: Reading Comprehension
Writing Skills and Grammar : Notice Writing, Business or Official Letters (Making enquiries, registering complaints, asking for or giving information, placing orders and sending replies), Speech writing, Tenses,Determiners, Reordering/ transformation of sentence
Literature : The Portrait of a Lady (Prose), A Photograph (Poem), We're Not Afraid to Die (Prose), The Laburnum (Poem), Discovering Tut, , Landscape of the soul (Prose) The Summer of the Beautiful White Horse(Prose), The Address (Prose), Ranga's Marriage (Prose)

October	7. The Voice of the Rain (Poem)	4. Albert Einstein at School (Prose)	Note Making & Summarising		
November	8. The Ailing Planet (Prose) 9.Childhood (Poem)	5. Mother's Day (Prose)	Poster Making	Recapitulation of Tenses	
December	10.The Browning Version (Prose)		Official Letters: e.g. to school/college authorities (regarding admissions, school issues, requirements / suitability of courses	Recapitulation of Determiners Recapitulation of Reordering/ transformation of sentence	

Syllabus for Periodic Test-2

Reading: Reading Comprehension and Note Making.
Writing Skills and Grammar: Poster Making,Official Letters , Tenses, Determiners,Re-ordering of sentences
Literature : Voice of the Rain (Poem),Childhood (Poem), The Ailing Planet (Prose), Albert Einstein at School (Prose),Mother's Day (Prose)

January	11.Silk Road (Prose)	6.Birth (Prose)	Debate Writing		Listening & Speaking Skills (ASL)
February	Revision				Listening & Speaking Skills (ASL)

Syllabus for Term-II Examination

Reading: Reading Comprehension and Note Making
Writing Skills and Grammar: Official Letters , Poster Making,Debate Writing,Tenses, Determiners, Reordering/ transformation of sentence
Literature: The Voice of the Rain (Poem) The Ailing Planet: The Green Movement's Role (Prose) The Browning Version(Play) Childhood (Poem) Silk Road (Prose),Albert Einstein at School (Prose) Mother's Day (Play) Birth (Prose)

SUBJECT: PHYSICS

MONTH	LESSON	EXPERIMENT
June	2. Units Measurement And Dimension	
July	2. Units Measurement And Dimension (Contd) 3. Motion In One Dimension 4. Motion In Two Dimension	**A1. (a)** To measure diameter of a small spherical/cylindrical body using Vernier Callipers. **(b)** To measure internal diameter and depth of a given beaker /calorimeter using Vernier Callipers and hence find its volume. **Act1.** To make a paper scale of given least count, e.g. 0.2cm, 0.5 cm. **A2. (a**) To measure the diameter of a given wire using a screw gauge. **(b)** To measure thickness of a given sheet using a screw gauge.
Syllabus for Periodic Test 1(TERM-1) - L-2 and L-3		
August	4. Motion In Two Dimension (Contd) 5. Laws of Motion	**A3.** To determine volume of an irregular lamina using screw gauge. **Act2.** To plot a graph for a given set of data, with proper choice of scales and error bars.
September	6.Work Energy and Power 7. System Of Particles And Rotational Motion	**A4.** To determine the radius of curvature of a given spherical surface by a spherometer. **A5.** To find the weight of a given body using the parallelogram law of vectors. **A6.** Using a simple pendulum, plot its L-T^2 graph and use it to find the effective length of second's pendulum. **Act3.** To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.
October	8.Gravitation	**B1.** To find the force constant of a helical spring by plotting a graph between load and extensions.
Syllabus for Term-1 Examination:- L-2, L-3, L-4, L-5, L-6, L-7, L-8		

November	9.Mechanical Properties of Solids	**B2.** To determine the surface tension of water by capillary rise method. **Act4.** To study the effect of detergent on surface tension of water by observing capillary rise.
December	10.Fluid Mechanics	**B3.** To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.
Syllabus for Periodic Test 2(TERM-2) - L-9 and L-10		
January	11.Thermal Properties of Gases 12.Thermodynamics 13.Kinetic Theory Gases	**B4.** To study the relation between frequency and length of a given wire under constant tension using a sonometer. **Act5.** To observe and explain the effect of heating on a bi-metallic strip. **B4.** To study the relation between the length of a given wire and tension for constant frequency using a sonometer.
February	14. Oscillation 15. Wave Motion	**Act6.** To study the factors affecting the rate of loss of heat of a liquid. **B4.** To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.
March	15. Wave Motion (Contd...) Revision for Final Examinations	
Syllabus for Annual Term-2 Examination:- L-9, L-10, L-11, L-12, L-13, L-14, L-15		

SUBJECT: CHEMISTRY

MONTH	CHAPTER	EXPERIMENT
June	1. Some basic concepts of Chemistry	
July	2. Structure of Atom 3. Classification of elements and periodicity in properties 4. Chemical Bonding and molecular structure.	1. Introduction to the Laboratory. 2. Determination of molarity and strength of HCl solution using M/10 NaOH solution.

August	4. Chemical Bonding and molecular structure. (Cont.) 8. Redox Reactions 9. Hydrogen	3. Determination of molarity and strength of NaOH solution using M/20 Oxalic acid solution. 4. Determination of molarity and strength of HCl solution using M/20 Na_2CO_3 solution
PERIODIC TEST-1 SYLLABUS CHAPTER: 01 Some basic concepts of Chemistry, 02 Structure of Atom & 03 Classification of elements and periodicity in properties		
September	12. Organic Chemistry: Some basic Principles and Techniques	5. Preparation of pure crystals of Benzoic acid from impure sample. 6. Preparation of pure crystals of alum from impure sample.
October	5. States of Matter: Gases & Liquids	7. Inorganic salt analysis [Pb (NO3)2] 8. Inorganic salt analysis [CuSO4, BaCl2]
TERM I EXAMINATION SYLLABUS CHAPTER: 01, 02, 03, 04, 08, 09 and 12.		
November	6. Chemical Thermodynamics	9. Inorganic salt analysis [Al (NO3)3, NiSO4, CoCl2]
December	7. Equilibrium	10. Inorganic salt analysis [NH4Br, BaBr2, Sr (NO3)2] 11. Inorganic salt analysis [CaCl2, MgSO4, (NH4)2SO4]
PERIODIC TEST-2 SYLLABUS CHAPTER: 5 States of Matter, 6 Chemical Thermodynamics.		
January	10. s-Block Elements 11. p-Block Elements	Completion of Journal.
February	13. Hydrocarbon	
TERM II EXAMINATION SYLLABUS CHAPTER: 05, 06, 07, 10, 11 and 13.		

SUBJECT: BIOLOGY

MONTH	LESSONS	ACTIVITIES/ PRACTICALS
June	**1.**The Living World	
July	**2.** Biological Classification **3.** Plant Kingdom **4.** Animal Kingdom **5.** Morphology of Flowering Plants	**B1.** Study of the parts of a compound microscope. **B2.** To study specimens/slides/models and identification with reasons - Bacteria, Oscillatoria,Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.

Syllabus for PT 1- Chapter:1 to 4		
August	**5.** Morphology of Flowering Plants (**Contd.**) **7.** Structural Organization in Animals	**B3.** Virtual specimens/slides/models and identifying features of - Amoeba, Hydra,liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit. **A1.** Study and describe a locally available common flowering plant, from any one family:Solanaceae or Liliaceae , including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams).
September	**8.** Cell **9.**Biomolecules **Revision**	**A2.** Study of osmosis by potato osmometer.
Syllabus for Term-I Examination- Chapter:1,2,3,4,5,7,8 and 9		
October	**10.** Cell cycle **13:** Photosynthesis in Higher Plants	**B.4** Tissues and diversity in shape and size of animal cells (squamous epithelium, smooth, skeletal and cardiac muscle fibers and mammalian blood smear) through temporary/permanent slides. **B.5** Mitosis in onion root tip cells and animal cells (grasshopper) from permanent slides.
November	**13:** Photosynthesis in Higher Plants (**Contd.)** **14:** Respiration in Plants	**A3.** Separation of plant pigments through paper chromatography. **A4.**Study of distribution of stomata in the upper and lower surface of leaves.
December	**14:** Respiration in Plants (**Contd.)** **15:** Plant - Growth and Development	**A5.** Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
Syllabus for Periodic Test-2 – CH 10,13 and 14		
January	**17:** Breathing and Exchange of Gases **18:** Body Fluids and Circulation **19:** Excretory Products and Their Elimination	**A6.** Test for presence of sugar in urine. **A7.** Test for presence of albumin in urine.
February	**20:** Locomotion and Movement **21:** Neural Control and Coordination **22:** Chemical Coordination and Integration	
Syllabus for Term -II Examination - Chapters:10,13,14,15,17,18,19,20,21 and 22		

SUBJECT: MATHEMATICS

MONTH	CHAPTERS	ACTIVITIES
June	Ch1. Sets Ch2. Relations and Functions	1. To find the number of subsets of a given set and verify that if a set has n number of elements, then the total number of subsets is 2^n.

		2. To represent set theoretic operations using Venn diagrams.
July	Ch2. Relations and Functions (Contd…) Ch5. Complex Numbers and Quadratic equations Ch6. Linear Inequalities	3.To interpret geometrically the meaning of iota and its integral powers.
August	Ch9. Sequences and Series Ch15. Statistics	
Syllabus for P.T. 1 : Chapters : 1, 2 and 6		
September	Ch15. Statistics (Contd...) Ch13. Limits and Derivatives (Only limits)	4. To find the limit of a function analytically.
October	Ch10. Straight Lines	
Syllabus for Term I : Chapters : 1, 2, 5, 9, 10, 13 (LIMITS ONLY) and 15		
November	Ch3. Trigonometric Functions	1. To verify that the graph of a given inequality, say $5x + 4y - 40 < 0$, of the form $ax + by + c < 0, a, b > 0, c < 0$ represents only one of the two half planes.
December	Ch7. Permutations and Combinations	
Syllabus for P.T. 2 : Chapters : 3 and 7 (Upto Ex: 7.3)		
January	Ch7. Permutations and Combinations (Contd...) Ch11. Conic sections	2. To find the number of ways in which three cards can be selected from given five cards. 3. To construct a parabola.
February	Ch13. Limits and Derivatives (Only derivatives) Ch16. Probability	4. To write the sample space, when a die is rolled once as well as rolled twice.
March	Ch12. Introduction to three-dimensional geometry	
Syllabus for Term II : Chapters : 3, 6, 7, 11, 12, 13 (DERIVATIVES ONLY) and 16.		

SUBJECT: COMPUTER SCIENCE

MONTH	CHAPTERS	ACTIVITIES/PRACTICALS
June	Ch6. Getting Started with Python Ch7. Python Fundamentals	Program based on print, input
July	Ch8. Data Handling	Program based on operators, if else
August	Ch9. Flow of Control Ch10: String Manipulation	Program based on Loops Program based on Strings
Syllabus for P.T.-1: Chapters: 6, 7, 8		
September	Ch1. Computer System Overview Ch2 .Data Representation ch3 : Boolean Logic	Program based on Strings
October	Ch5. Introduction to Problem Solving	
Syllabus for Term-1 Examination: Chapters: 6, 7, 8, 9,10,1,2,3,5		
November	Ch11.List Manipulation	Programs based on Lists
December	Ch12. Tuples Ch13. Dictionaries Ch15. Cyber Safety	Program based on Tuples Program based on Dictionaries
Syllabus for P.T. 2 : Chapters : 11,12,13		
January	Ch15. Cyber Safety (.....Continue) CH16. Online Access and Computer Security	Completion of Practical File Project Work
February	Ch17: Society Law and Ethics	Project Work Submission
March	REVISION	REVISION
Syllabus for Term-2 Examination: 11,12,13,15,16,17		

SUBJECT: PHYSICAL EDUCATION

MONTH	CHAPTERS	ACTIVITIES / PRACTICALS
June	Unit: 1 Changing trends and Career in Physical education. Unit:2 Olympic Value education.(Till first week of July-Continue)	Project File (About one sport/game of choice)
July	Unit: 2 Olympic Value education. (Till first week of July. Unit:3 Physical Fitness, wellness & life Unit:4 Physical Education& Sports for CWSN(Continue)	Project File (About one sport/game of choice)
August	Unit:4 Physical Education & Sports for CWSN Unit:7 Test and Measurement (Continue)	Demonstration of Fitness Activity
Syllabus for P.T. 1 : Chapters : Unit: 1 ,Unit: 2 , Unit:3 & Unit-4		
September	Unit:7 Test and Measurement Unit:8 Anatomy & Physiology (Continue)	Viva Voce (From Project File; Fitness)
October	Unit:8 Anatomy & Physiology Unit:5 Yoga	Project File (Yoga and General Motor Fitness Test)
Syllabus for Term-I : Chapters : Unit- 1,2,3,7 & 8		
November	Unit:6 Physical Activity & Leadership Training(Continue)	Project File (Yoga and General Motor Fitness Test)
December	Unit:6 Physical Activity & Leadership Unit: 9 Psychology & Sports(Continue)	Demonstration of Fitness Activity/Yoga
Syllabus for P.T. 2 : Chapters : Unit 5,6&9		
January	Unit: 9 Psychology & Sports Unit: 10 Training & Doping in Sports (Continue)	Demonstration of Fitness Activity/Yoga
February	Unit: 10 Training & Doping in Sports.	Viva Voce (From Viva Voce (From Project File; General Motor Fitness; Yoga)
March	Revision For Annual Exam	Revision
Syllabus for Term - II Examination : Unit 4,5,6,9 & 10		

SUBJECT: PSYCHOLOGY

MONTH	CHAPTERS	ACTIVITIES
June	Ch-1 What is Psychology? (13-16 periods)	
July	Ch-1 What is Psychology? Ch-2 Methods of Enquiry in Psychology (20 periods)	Practical: Case study/ interview (structured or unstructured)/survey/observation (choice & topic shall be provided)
August	Ch-3 The Bases of Human Behavior (22 periods)	Mini project: Write a story portraying a part of the brain as king/queen/hero unfolding his/her powers (functions) and how any invader (disturbed functioning/disorder) impacts the kingdom.
Syllabus for P.T. 1 : Chapters : 1 & 2		
September	Ch-3 The Bases of Human Behavior Ch-4 Human Development (16 periods)	
Syllabus for Term I : Chapters : 1, 2 & 3		
October	Ch-5 Sensory, Attentional and Perceptual Processes (12 periods)	
November	Ch-5 Sensory, Attentional and Perceptual Processes Ch-6 Learning (17 periods)	Submission of practical file (assigned in July)
December	Ch-6 Learning Ch-7 Human Memory (15 periods)	Experiment : To draw learning curve
Syllabus for P.T. 2 : Chapters : 4 & 5		
January	Ch-7 Human Memory	Submission of experiment file (assigned in December)
February	Revision	
March	Revision	
Syllabus for Term II : Ch4, 5, 6 & 7		