

### **DELHI PUBLIC SCHOOL UDAIPUR**

Syllabus Breakup for the Session 2020-21 Class-XI (Science)

#### **ENGLISH**

<u>ENGLISH</u>		
Unit /Chapter /Topics		
Writing Skills: Notice Writing, Poster		
Snapshots		
<ul> <li>The Summer of the Beautiful White Horse (Prose)</li> <li>Writing Skills: Introduction of Figures of Speech</li> </ul>		
Summer vacation		
Hornbill		
• The Portrait of a Lady (Prose)		
• A Photograph (Poem)		
Snapshots		
• The Address		
writing Skills: Business letters & Grammar		
Hornbill		
• Discovering Tut (Prose)		
• The Ailing Planet		
Snapshots  • Panga's Marriage		
<ul><li>Ranga's Marriage</li><li>Albert Einstein at School</li></ul>		
Writing Skills: Official Letters & Grammar Note Making &		
Summarising		
REVISION & Half Yearly Examination		
Hornbill		
• The Ailing Planet- The Green Movements Role		
Snapshots		
Mother's Day		
Writing Skills: Speech		
Hornbill  The Drawning Version		
<ul> <li>The Browning Version</li> <li>Snapshots</li> </ul>		
• Birth		
Writing Skills: Debate		
Hornbill		
Silk Road		
<ul> <li>Landscape of the soul</li> </ul>		

#### **PHYSICS**

Month	Unit /Chapter /Topics		
April 2020	Ch -1: Physical World		
	Ch −2: Units & Measurement		
May 2020	Ch −3: Motion in a Straight Line		
	Ch −4: Motion in a Plane		
July 2020	Ch −5: Laws of Motion		
	Ch – 6 : Work, Energy and Power (conti)		
August 2020	Ch – 6 : Work, Energy and Power		
August 2020	Ch – 7 : System of particles and rotational motion		
	Ch – 8 : Gravitation		
September 2020	Ch – 9 : Mechanical Properties of Solids		
	Ch – 10 : Mechanical properties of fluids(conti)		
October 2020	Ch – 10 : Mechanical properties of fluids		
October 2020	Ch – 11 : Thermal properties of matter		
	Ch – 12 : Thermodynamics		
November 2020	Ch – 13 : Kinetic Theory of gases		
	Ch – 14 : Oscillations		
December 2020	Ch – 14 : Oscillations (contd)		
December 2020	Ch – 15 : Waves		
January 2021	Revision Work		
February 2021	Annual Examination		

### **CHEMISTRY**

Month	Unit /Chapter /Topics		
April 2020	Some basic concepts of matter		
May 2020	Structure of atom		
July 2020	Structure of atom		
July 2020	Classification of elements and periodicity in properties		
August 2020	Chemical bonding and molecular structure		
August 2020	States of matter		
September 2020	Chemical thermodynamics		
September 2020	Redox reaction		
October 2020	S- block elements		
October 2020	EquilibriumI and II		
November 2020	Organic chemistry-Some basic principles and techniques		
December 2020	P- block elements		
December 2020	Hydrocarbons		
January 2021	New session begins for Class XII		
February 2021			

## **MATHEMATICS**

Month	Unit /Chapter /Topics	
April 2020	Chapter – 1 : Sets	
May 2020	Chapter – 2: Relations and Functions	
July 2020	Chapter – 4 : Principle of Mathematical Induction	
August 2020	Chapter – 3: Trigonometric function	
	Chapter – 5 : Complex numbers and Quadratic equations	
September 2020	Chapter – 6: Linear inequalities	
	Chapter – 9 : Sequences and Series	
October 2020	Revision & Half yearly	

November 2020	Chapter – 7: Permutations and combinations
	Chapter – 8 : Binomial Theorem
	Chapter – 10 : Straight lines
December 2020	Chapter – 11 : Conic Sections
	Chapter – 12: Introduction to 3-D Geometry
January 2021	Chapter – 13: Limits and derivatives
	Chapter – 14: Mathematical Reasoning
February 2021	Chapter – 15 : Statistics
	Chapter – 16 : Probability
February 2021	Revision Work & Annual Examination

## **BIOLOGY**

Month	Unit /Chapter /Topics		
April 2020	<u>Unit – V</u> : Physiology (Human)		
April 2020	Ch – 16 : Digestion and Absorption		
	Ch – 17 : Breathing and Exchange of Gases		
May 2020	Ch – 18 : Body Fluids and Circulation		
July 2020	Ch – 19 : Excretory Products and their Elimination		
July 2020	Ch – 20 : Locomotion & Movement		
	Ch – 21 : Neural Control and Coordination		
	Ch – 22 : Chemical Coordination & Integration		
August 2020	<u>Unit – III</u> : Cell Structure & Function		
	Ch – 8 : Cell : Unit of Life		
	Ch – 9 : Bio molecules		
	Ch – 10 : Cell cycle & Cell Division		
September 2020	<u>Unit – II</u> : Structural Org. in Plants & Animals.		
	Ch – 5 : Morphology of Flowering Plants		
October 2020	Revision and Half Yearly Exam		
November 2020	Ch – 6: Anatomy of Flowering Plants		
November 2020	Ch – 7 : Structural Org. in Animals		
	<u>Unit – IV</u> : Plant Physiology		
December 2020	Ch – 11 : Transport in Plants		
December 2020	Ch – 12 : Mineral Nutrition		
	Ch – 13 : Photosynthesis in Higher Plants		
January 2021	Ch – 14 : Respiration in Plants		
January 2021	Ch – 15 : Plant Growth & Development		
	<u>Unit – I</u> : Diversity in Living World		
February 2021	Ch – 1 : The Living World		
	Ch – 2 : Biological Classification		
	Ch – 3 : Plant Kingdom		
	Ch – 4 : Animal Kingdom		
February 2021	Revision Work & Annual Exams		

#### **PHYSICAL EDUCATION**

Month	Chapter
April 2020	Unit 1: Changing Trends and career in Physical Education
May 2020	Unit 3: Physical Fitness, Wellness & Lifestyle
-	Unit 5: Yoga
July 2020	Unit 6: Physical Activity & Leadership
	Unit 7: Test, Measurement and Evaluation
	Unit 2: Olympic Value Education
	Revision & Online MCQ test of all completed chapter
August 2020	Unit 10: Training & Doping in Sports
	Unit 8: Fundamental of Anatomy, Physiology & Kinesiology in Sports
	Online MCQ test of all completed chapter
September 2020	Unit 9: Psychology and Sports
	Unit 4: Physical Education & Sports for CWSN
	Online MCQ test of all completed chapter
October 2020	Revision of All Chapters with online test
November 2020	Revision of All Chapters with online test
December 2020	Revision of All Chapters with online test
January 2021	Revision of All Chapters with online test
February 2021	Annual Exam

### **FINE ARTS (PAINTING)**

Month	Unit /Chapter /Topics
April 2020	Theory :- unit :1 :- Design fundamentals
May 2020	Theory :- unit :1 :- Design fundamentals and Practical
July 2020	Theory :- unit :2 :- Overview of fashion
August 2020	Theory :- unit :3 :- Introduction to fibres dyeing and printing
September 2020	Theory :- unit :3 :- Introduction to fibres dyeing and printing and practical
October 2020	Theory :- unit :4 :- Elements of garment making and Practical
November 2020	Revision of syllabus
December 2020	Revision of syllabus
January 2021	
February 2021	

### **ENTREPRENEURSHIP**

Month	Unit /Chapter /Topics
April 2020	Ch – 1 : Entrepreneurship Concept & Function
May 2020	Ch − 1 : Entrepreneurship Concept & Function (Conti)
July 2020	Ch – 2 : An Entrepreneur
August 2020	Ch – 2 : An Entrepreneur (Conti)
September 2020	Ch – 4: Entrepreneurship as Innovation & Problem Solving
October 2020	Ch – 3 : An Entrepreneurial Journey
November 2020	Ch- 5: Understanding of Market
	Ch – 6: Business Arithmetic
December 2020	Ch – 7 : Resource Mobilization
January 2021	Revision Work
February 2021	Project Work Revision Work

### **PSYCHOLOGY**

Month	Unit /Chapter /Topics	
April 2020	Unit I: What is psychology?	
May 2020	Unit VII : Human Memory	
July 2020	Jnit IV : Human Development	
August 2020	Unit III : The Bases of Human Behaviour	
September 2020	Unit II : Methods of enquiry in Psychology	
	Unit IX : Motivation and Emotional	
October 2020	Unit V : Sensory, Attentional and perceptual processes	
November 2020	Unit VI : Learning	
December 2020	Revision Work	
January 2021	Revision Work & Annual Exams	

# **Informatics Practices (065)**

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Month	Topics		
A	Unit 1: Introduction of Computer System		
April 2020	Basic computer organisation: Computer system – I/O Devices		
May 2020	Unit 1: Trouble shooting – Study of computer and basic operations of operating		
IVIAY 2020	system Basic concept of Data representation: Binary, ASCII, Unicode		
	Unit 2: Introduction Python Programming		
June 2020	Familiarization with the basic of Python programming: process of writing a program,		
	running it, and print statements.		
July 2020	Unit 2: Concept studies - L-value and R-value even if not taught explicitly). Tokens -		
July 2020	keywords, identifiers, Literals, Delimiters. Knowledge of data type and operators:		
	Unit 2: Suggested programs: finding average and grade for given marks, amount		
	calculation Conditional statements: if, if-else, if-elif-else; simple programs: e.g.: absolute		
	value, sort 3 numbers, divisibility. Notion of iterative computation and control flow: for (		
	range(), len ()), while, flowcharts.		
August 2020	Unit 2: List and dictionary: finding the maximum, minimum, mean; linear search on a		
	list of numbers, and counting the frequency of elements in a list using a dictionary.		
	Text handling: compare, concat, and substring operations (without using string module).		
	Unit 2: Introduction to Python modules: importing math (sqrt, ceil, floor, pow, fabs),		
	random (random, randint, randrange), statistics (mean, median) modules.		
September 2020	Revision forMID TERM Exams		
	Unit 3: Data Handling		
October 2020	Numpy 1D array, 2D array Arrays: slices, joins, and subsets. Arithmetic operations on 2D		
	arrays.		
	Unit 4: Data Management		
November 2020	Relational databases: Concept of a database, relations, attributes and tuples, keys -		
	candidate key, primary key, alternate key, foreign key; Degree and Cardinality of a table.		
	Unit 5: Society, Law and Ethics		
December 2020	Cyber safety: safely browsing the web, identity protection, confidentiality, social networks,		
	netiquettes, digital footprint, cyber trolls and bullying. Appropriate usage of social		
	networks: spread of rumours, and common social networking sites (Twitter, LinkedIn, and		
	Facebook) and specific usage rules.		
January 2020	Revision for Annual Exam		
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# **Computer Science (083)**

Month	No. of Working Days	Topics
April	12 days	<ul> <li>Unit 1: Computer Systems and Organisation</li> <li>Basic computer organization, CPU, memory, hard disk, I/O, battery.</li> </ul>

		Types of software, Memory Units, Boolean logic: truth tables, De Morgan's laws.		
Мау	9 days	<ul> <li>Unit 1 : continue</li> <li>Information representation: numbers in base 2, 8, 16, binary addition.</li> <li>Strings: ASCII, UTF8, UTF32, ISCII Indian script code, Unicode.</li> <li>Concept of Compiler &amp; Interpreter. Running a Program</li> </ul>		
June	12 days	<ul> <li>Unit 1 : continue</li> <li>Basic concepts of Flowchart.</li> <li>Concept of cloud computing,</li> <li>Unit 2: Computational Thinking and Programming</li> <li>Basics of Computational Thinking: Decomposition, Pattern Recognition/ Data representation, Generalization/ Data Abstraction and algorithm.</li> </ul>		
July	26 days	<ul> <li>Unit 2: Continue</li> <li>Process of writing a program</li> <li>Features of Python, Python Character Set, Token &amp; Identifiers, Keywords, Literals, Delimiters, operators. Comments: Continuation statements.</li> <li>Introduce the notion of a variable, and methods to manipulate.</li> <li>Knowledge of data types and operators: accepting input from the console, assignment statement, expressions, operators and their precedence.</li> </ul>		
August	22 days	<ul> <li>Unit 2: Continue</li> <li>Lists, tuples and dictionary:</li> <li>Sorting algorithm: bubble and insertion sort; count the number of operations while sorting. Strings: Traversing, compare, concat, substring.</li> <li>Introduction to Python modules:</li> </ul>		
September	07 days	Revision forMID TERM Exams		
October	15 days	Unit 3: Data Management Relational databases:  Concept of a database, relations, attributes and tuples, keys- candidate key, primary key, alternate key, foreign key; Degree and cardinality of a table.		
November	23 days	<ul> <li>Unit 3: Continue</li> <li>Use SQL – DDL/ DML commands to CREATE TABLE, INSERT INTO,</li> <li>UPDATE, DELETE, ALTER, MODIFY, DROP TABLE, Primary keys, and foreign keys; SELECT-FROM- WHERE-ORDER BY along with BETWEEN, IN, LIKE, Queries.</li> <li>Aggregate functions – MIN,MAX,AVG,COUNT,SUM</li> </ul>		
December	23 days	<ul> <li>Unit 4: Society, Law and Ethics - Cyber safety</li> <li>Cyber safety: safely browsing the web, identity protection, confidentiality,</li> <li>social networks, cyber trolls and bullying</li> <li>Safely accessing web sites: adware, malware, viruses, Trojans.</li> </ul>		
January	22 days	Revision for Annual Exam		
April	12 days	Annual Exams		

## **Economics**

	No. of	Unit /Chapter /Topics	
Month	Working	Indian Economics	Statistics
	Days		
April		-	Ch – 1 : Concept of Economics &
	13 days		Significance of Statistics in Economics
			Ch – 2 : Collection of Data
B.4 a.v.		Ch – 1 : Economics & Economy	-
May	9 days	Ch – 2 : Central Problems of An	
		Economy	
June	12 days	Ch – 3 : Consumer's Equilibrium-	-
		Utility Analysis	
July	26 days	Ch – 4 : Consumer's Equilibrium-	Ch – 3 : Census & Sample Method
		Indifference curve analysis	Ch – 4 : Organisation of Data

August	22 Days	Ch – 6 : Elasticity of Demand Ch – 5 : India's Foreign Trade	Ch – 5 : Presentation of Data (Textual & Tabular)	
September	7 days	Ch – 7 : Theory of Demand Ch – 8 : Concept of Cost	Ch – 6: Diagrammatic Presentation of Data Ch – 7: Frequency Diagram Ch – 8: Arithmetic Line Graph	
October	15 days	Ch – 9 : Concept of Revenue	Ch – 8 : Human Capital Formation and Arithmetic Line Graph Ch – 9 : Arithmetic Mean	
November	23 days	Ch – 10 : Producer's Equilibrium	Ch – 10 : Median & Mode	
December	23 days	Ch – 11 : Theory of Supply	Ch – 11 : Measures of Dispersion	
January	22 days	Ch – 12 : Forms of Market Ch – 13 : Market equilibrium	Ch – 12 : Correlation Ch – 13 : Index Numbers	
February	23 days	Revision Work & Annual Exams		
March 2019		New session begins for Class XII		

Principal I/C Class Coordinator