# Grade 12 Curriculum



Ridge Valley School Annual Curriculum 2020-21

# CONTENT

- English
- Physics
- Chemistry
- Biology
- Mathematics
- Computer Science
- Accountancy
- Business Studies
- Economics
- Political Science
- Legal Studies
- Psychology
- Painting
- Physical Education

# ENGLISH

Language shapes the way we think and determines

what we can think about. - Benjamin Lee Whorfa

Term 1

Cycle No.	Dates from	То	Syllabus
1	02.03.2020	13.03.2020	My Mother at Sixty Six, Notice Writing- Format 1 & 2,Recapitulation - Letter to the Editor
2	30.03.2020	09.04.2020	The Third Level, The Last Lesson , Letter to the Editor(Beginning & Ending)
3	13.04.2020	24.04.2020	Keeping Quiet, Lost Spring, Article Writing
4	27.04.2020	08.05.2020	Deep Water, The Enemy
5	11.05.2020	29.05.2020	The Enemy, Indigo
Exam	29.06.2020	03.07.2020	Interim Exam
6	06.07.2020	17.07.2020	Report Writing (Newspaper & Magazine Report) Classified Advertisements, An Elementary School Classroom in a Slum
7	20.07.2020	30.07.2020	Should Wizard Hit Mommy, The Rattrap
8	04.08.2020	14.08.2020	Long writing skills- Speech A Thing of Beauty, article writing
9	17.08.2020	28.08.2020	Long writing skills- Speech, article writing
10	31.08.2020	04.09.2020	Revision Cycle
Exam	07.09.2020	18.09.2020	Mid term Exam

I erm 2

Cycle No.	Dates from	То	Syllabus
11	21.09.2020	01.10.2020	On the Face of it, Aunt Jennifer's Tigers
12	05.10.2020	16.10.2020	Job Application, Circular letter
13	19.10.2020	30.10.2020	Evans Tries an O Level
14	02.11.2020	20.11.2020	Long writing skills – Report (Newspaper & Magazine) & Article
15	23.11.2020	04.12.2020	Revision & Mock Tests
16	07.12.2020	10.12.2020	Revision & Mock Tests
Exam	11.12.2020	24.12.2020	Pre-Board 1
Exam	06.01.2021	15.01.2021	Pre-Board 2

# **Physics**

"What one man calls God, another calls the laws of physics" – Nikola Tesla.

Cycle No.	Dates from	То	Grade 12	
1	02.03.2020	13.03.2020	Electric charges, Electric forces, Coulomb's law in electrostatics, Electric field, Electric dipole, Electric torque, Gauss law and Applications of Gauss law	
2	16.03.2020	27.03.2020	Electric potential and electric energy, Equipotential surfaces, capacitor and its types, Dielectric constant, Polar and non-polar molecules, Energy stored and energy loses of capacitors.	
3	30.03.2020	09.04.2020	Electric conduction in conductors, Ohm's laws, cells in series and parallel, Kirchhoff's laws, Wheat Stone bridge, Meter Bridge, Potentiometer	
4	13.04.2020	24.04.2020	Magnetic fields, Biot-Savart's law and its applications, Ampere's circuital law, Magnetic force and Torque, Moving Coil Galvanometer.	
5	27.04.2020	08.05.2020	Bar Magnet, Magnetic flux, Components of Earth's magnetic field, Curie's law in magnetism, Hysteresis Loop	
6	11.05.2020	29.05.2020	Electromagnetic induction, Faraday's laws of Electromagnetic Induction, Lenz's law	
	29.06.2020	03.07.2020	Interim Exams	
8	06.07.2020	17.07.2020	Self-induction and mutual induction, Motional Emf, Grouping of inductors, Energy stored and energy density of inductor	
9	20.07.2020	30.07.2020	Root mean square and mean value of current and Emf, Phase difference between current and Emf of an inductor, Resistor and capacitor.	
10	04.08.2020	14.08.2020	RLC Circuits, LC oscillations, AC generator	
11	17.08.2020	28.08.2020	Revision of Electromagnetic induction and Alternating Current.	
	31.08.2020	04.09.2020	Revision Cycle	
	07.09.2020	18.09.2020	Mid-term exam	

Term 2

Cycle	Dates from	То	Orada 40	
No.			Grade 12	
12	21.09.2020	01.10.2020	Electromagnetic Spectrum, Uses, Production and Detection of parts of electromagnetic waves, Light, Refraction, Prism, Total internal reflection,	
13	05.10.2020	16.10.2020	Optical instruments, Superposition of waves, Interference, Polarization, Diffraction of light, Work-function, Einstein Photoelectric effect, De-Broglie's wavelength.	
14	19.10.2020	30.10.2020	Impact Parameter, Distance of closest approach, Velocity, Radius, Total energy of revolving electron, mass defect	
15	02.11.2020	20.11.2020		
16	23.11.2020	04.12.2020	Revision of full syllabus through sample Papers	
17	07.12.2020	10.12.2020	Revision Cycle	
	11.12.2020	24.12.2020	Pre-Boards I & result	
	06.01.2021	15.01.2021	Pre-Board II	
	18.01.2021	20.01.2021	Result discussion	

# Chemistry

"Chemistry is a mystery of chemicals; Chemists are the detectives who solve this mystery."

I erm 1				
Cycle No.	Dates from	То	Grade 12	
1	02.03.2020	13.03.2020	Classification and nomenclature of Haloalkanes and Haloarenes, preparation of haloalkanes and haloarenes, Physical and chemical properties of haloalkanes and haloarenes.	
2	16.03.2020	27.03.2020	Classification and nomenclature of Alcohols, phenols and ethers, Preparation of alcohols, phenols and ethers, physical and chemical properties of Alcohols, phenols and ethers.	
3	30.03.2020	09.04.2020	Henry's law of solubility, Raoult's law of Vapor pressure, Relating lowering of vapor pressure, Elevation of boiling point, depression in freezing point, osmotic pressure.	
4	13.04.2020	24.04.2020	Electrochemical cells and Electrolytic cells, Electrode potentials, Nernst equation, Standard hydrogen electrode, conductance and resistance, molar conductivity and resistivity.	
5	27.04.2020	08.05.2020	Rate of reaction, Units of rate constants, Integrated rate equations, Half-life of zero order, First order and second order reactions. Pseudo first order reaction.	
6	11.05.2020	29.05.2020	Classification and nomenclature of aldehydes, ketones and carboxylic acids, preparation of aldehydes, ketones and carboxylic acids, Physical and chemical properties.	
	29.06.2020	03.07.2020	Interim Exams	
8	06.07.2020	17.07.2020	Classification and nomenclature of Amines, Preparation of Amines, Physical and chemical properties of Amines. Basic character of Amines.	
9	20.07.2020	30.07.2020		
10	04.08.2020	14.08.2020	Preparation of colloidal solutions and Properties of colloidal solutions.	
11	17.08.2020	28.08.2020	Revision cycle	
	31.08.2020	04.09.2020	Revision cycle	
	07.09.2020	18.09.2020	Mid- term exam	

Term 1

Cycle No.	Dates from	То	Grade 12
12	21.09.2020	01.10.2020	Carbohydrates, monosaccharides, Preparation and different structures and reactions of glucose, proteins, classification of amino acids, denaturation of proteins, nucleic acids - DNA, RNA.
13	05.10.2020	16.10.2020	Occurrence and different properties of 15 <sup>th</sup> group elements, Dinitrogen and ammonia, Oxoacids of phosphorus, dioxygen- preparation and properties, oxides and ozone, allotropic forms of Sulphur, Group 17 elements, oxoacids of halogens.
14	19.10.2020	30.10.2020	The transition elements, general physical and chemical properties of transition elements, Trends in electrode potentials, magnetic properties, Catalytic properties, oxides and oxo anions of metals, lanthanoids and actinoids, their general physical and chemical properties.
15	02.11.2020	20.11.2020	Revision through different sample papers
16	23.11.2020	04.12.2020,	Werner's theory of coordination compounds, Definitions of some important terms of coordination chemistry, Nomenclature of coordination compounds, valance bond theory, Crystal field theory, bonding in metal carbonyls.
17	07.12.2020	10.12.2020	Revision Cycle
	11.12.2020	24.12.2020	Pre-Boards I & result
	06.01.2021	15.01.2021	Pre-Board II
	18.01.2021	20.01.2021	Result Discussion

# Biology

Biology is the most powerful technology ever created. DNA is software, protein is hardware, cells are factories.

# Arvind Gupta

I erm 1				
Cycle No.	Dates from	То	Grade 12	
1	02.03.2020	13.03.2020	Reproduction in organisms, Sexual reproduction in flowering plants	
2	16.03.2020	27.03.2020	Sexual reproduction in flowering plants, Human Reproduction	
3	30.03.2020	09.04.2020	Human Reproduction, Reproductive health	
4	13.04.2020	24.04.2020	Reproductive health, Principles of inheritance and variation	
5	27.04.2020	08.05.2020	Principles of inheritance and variation, Molecular basis of inheritance	
6	11.05.2020	29.05.2020	Molecular basis of inheritance, Evolution	
	29.06.2020	03.07.2020	DNA replication; Central Dogma; transcription, genetic code, translation.	
8	06.07.2020	17.07.2020	Gene expression and regulation - lac operon; Genome	
9	20.07.2020	30.07.2020	Genome, Human and rice genome projects; DNA fingerprinting.	
10	04.08.2020	14.08.2020	Human Health and diseases - Pathogens; parasites causing human diseases (malaria, dengue, chikungunya, filariasis,ascariasis, typhoid)	
11	17.08.2020	28.08.2020	pneumonia, common cold, amoebiasis, ring worm) and their control;	
	31.08.2020	04.09.2020	Revision Cycle	
	07.09.2020	18.09.2020	Mid-term exam	

Term 2

Cycle No.	Dates from	То	Grade 12
12	21.09.2020	01.10.2020	Basic concepts of immunology - vaccines; cancer, HIV andAIDS;Adolescence-drugandalcoholabuse. Microbes in food processing, industrial production,
13	05.10.2020	16.10.2020	sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicious use.
14	19.10.2020	30.10.2020	Genetic Engineering (Recombinant DNA Technology), Biotechnology and its application, Organsims and populations
15	02.11.2020	20.11.2020	Organisms and Populations - Organisms and environment: Habitat and niche, population and ecological adaptations; population interactions - mutualism, competition, predation, parasitism; population attributes Biodiversity - Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves,
16	23.11.2020	04.12.2020	Revision of full syllabus through sample Papers
17	07.12.2020	10.12.2020	Revision Cycle
	11.12.2020	24.12.2020	Pre-Boards I & result
	06.01.2021	15.01.2021	Pre-Board II
	18.01.2021	20.01.2021	Result discussion

# Mathematics

"The moving power of mathematical invention is not reasoning but imagination."

• A.DeMorgan

Term 1					
Cycle No.	Dates from	То	Syllabus		
1	02.03.2020	13.03.2020	Matrices		
2	30.03.2020	09.04.2020	Determinants		
3	13.04.2020	24.04.2020	Linear Programming		
4	27.04.2020	08.05.2020	Inverse Trigonometric Functions		
5	11.05.2020	29.05.2020	Continuity and Differentiability		
Exam	29.06.2020	03.07.2020	Interim Exam		
6	06.07.2020	17.07.2020	Continuity and Differentiability		
7	20.07.2020	30.07.2020	Applications of Derivatives		
8	04.08.2020	14.08.2020	1		
9	17.08.2020	28.08.2020	Integrals		
10	31.08.2020	04.09.2020	Revision Cycle		
Exam	07.09.2020	18.09.2020	Mid- term Exam		

#### T 1

Cycle No.	Dates from	То	Syllabus
11	21.09.2020	01.10.2020	Integrals and Application of Integrals
12	05.10.2020	16.10.2020	Differential Equations
13	19.10.2020	30.10.2020	Vector Algebra
14	02.11.2020	20.11.2020	Three-Dimensional Geometry
15	23.11.2020	04.12.2020	Relations and Functions
16	07.12.2020	10.12.2020	Probability
Exam	11.12.2020	24.12.2020	Pre-Board 1
Exam	06.01.2021	15.01.2021	Pre-Board 2

# **Computer Science**

"If we wish to count lines of code, we should not regard them as 'lines produced' but as 'lines spent.' "— Edsger Dijkstra

Term 1

Cycle No.	Dates from	То	Lesson
1	02.03.2020	13.03.2020	Programming and Computational Thinking
2	16.03.2020	27.03.2020	Programming and Computational Thinking Working with Functions
3	30.03.2020	09.04.2020	Using Python Libraries
4	13.04.2020	24.04.2020	Using Python Libraries
5	27.04.2020	08.05.2020	Idea of Algorithmic Efficiency
6	11.05.2020	29.05.2020	Project Work
Extra Cl	asses 08.06.2	20 - 27.06.2020	Revision for Raise the Bar
INTERIM E	XAMS 29.06	.2020- 03.07.2020	Raise the bar Test Series- 1
7	06.07.2020	17.07.2020	Data Structures- Stacks and Queues
8	20.07.2020	30.07.2020	Data Structures- Stacks and Queues
9	04.08.2020	14.08.2020	Functions, Libraries & Data handling new topics
10	17.08.2020	28.08.2020	Project Work
Revision	31.08.2020	04.09.2020	Revision for Mid Term
Exam	07.09.2020	18.09.2020	Mid Term Examination

Cycle No.	Dates from	То	Lesson
11	21.09.2020	01.10.2020	Computer Networks- I & II
12	05.10.2020	16.10.2020	MYSQL SQL Revision Tour More on SQL
13	19.10.2020	30.10.2020	Creating Web Application using Django
14	02.11.2020	20.11.2020	Interface Python with MySQL
15	23.11.2020	04.12.2020	Society, Law and Ethics
Revision	07.12.2020	10.12.2020	Revision
Pre Boards I	11.12.2020	24.12.2020	Pre Board - I
Pre Boards II	06.01.2021	15.01.2021	Pre Board - II

# Accountancy



# Term 1

Cycle No.	Dates from	То	Lesson
1	02.03.2020	13.03.2020	Not for profit organisation (NPO)
2	16.03.2020	27.03.2020	Not for profit organisation (NPO) Introduction of fundamentals
3	30.03.2020	09.04.2020	Fundamentals of partnership
4	13.04.2020	24.04.2020	Goodwill and introduction of admission of a partner
5	27.04.2020	08.05.2020	Admission of a partner
6	11.05.2020	29.05.2020	Admission of a partner
Extra Classes 08.06.20 - 27.06.2020			Revision of admission of a partner
INTERIM	1 EXAMS 29.06	.2020- 03.07.2020	
7	06.07.2020	17.07.2020	Retirement of the partner
8	20.07.2020	30.07.2020	Death and changing profit sharing ratio
9	04.08.2020	14.08.2020	Dissolution of firm
10	17.08.2020	28.08.2020	Company accounts
Revision	31.08.2020	04.09.2020	Revision for Mid Term
Exam	07.09.2020	18.09.2020	Mid Term Examination

Cycle No.	Dates from	То	Lesson
11	21.09.2020	01.10.2020	Company accounts
12	05.10.2020	16.10.2020	Issue of debenture
13	19.10.2020	30.10.2020	Cash flow statement
14	02.11.2020	20.11.2020	Ratio analysis
15	23.11.2020	04.12.2020	Balance sheet, Common and comparative statement
Revision	07.12.2020	10.12.2020	Revision
Pre Boards I	11.12.2020	24.12.2020	Pre Board - I
Pre Boards II	06.01.2021	15.01.2021	Pre Board - II

# **Business Studies**

# Leadership belongs to those who take it.

—Sheryl Sandberg, COO of Facebook

## Term 1

Cycle No.	Dates from	То	Lesson	
1	02.03.2020	13.03.2020	Consumer protection and introduction of Marketing	
2	16.03.2020	27.03.2020	Marketing Management	
3	30.03.2020	09.04.2020	Marketing Management	
4	13.04.2020	24.04.2020	Financial management	
5	27.04.2020	08.05.2020	Financial management	
6	11.05.2020	29.05.2020	Fianacial markets	
Extra Cl	asses 08.06.2	20 - 27.06.2020	Revision	
INTERIM E	XAMS 29.06.	2020- 03.07.2020		
7	06.07.2020	17.07.2020	Introduction of management	
8	20.07.2020	30.07.2020	Principles of management	
9	04.08.2020	14.08.2020	Business environment and planning	
10	17.08.2020	28.08.2020	Organising	
Revision	31.08.2020	04.09.2020	Revision for Mid Term	
Exam	07.09.2020	18.09.2020	Mid Term Examination	

Cycle No.	Dates from	То	Lesson
11	21.09.2020	01.10.2020	Staffing
12	05.10.2020	16.10.2020	Directing
13	19.10.2020	30.10.2020	Directing and controlling
14	02.11.2020	20.11.2020	Controlling
15	23.11.2020	04.12.2020	Revison
Revision	07.12.2020	10.12.2020	Revision
Pre Boards I	11.12.2020	24.12.2020	Pre Board - I
Pre Boards II	06.01.2021	15.01.2021	Pre Board - II

# Economics

#### "In economics, hope and faith coexist with great scientific pretension and also a deep desire for respectability."

Cycle No.	From	То	Торіс
1	02.03.2020	13.03.2020	1. Basic concepts
			2. National Income - Aggregates
2	16.03.2020	27.03.2020	3. National Income- Calculation
3	30.03.2020	09.04.2020	1. Indian Economy on the eve of
			independence
4	13.04.2020	24.04.2020	2. Indian Economy -1950-90: Five Year
			Plans in India
5	27.04.2020	08.05.2020	3. Features, problems and Policies of
			Agriculture
			4. Strategy of Industrial Growth
6	11.04.2020	29.04.2020	5. India's Foreign Trade
			6. Economic Reforms
		MS 29.06.20	20- 03.07.2020
8	06.07.2020	17.07.2020	4. Money and Banking
			5. Current Challenges Facing Economy -
			Poverty
9	20.07.20202	30.07.2020	5. Aggregate Demand, Aggregate Supply
			6. Short run Equilibrium output
			7. Problem of Deficient and Excess
			Demand
10	04.08.2020	14.08.2020	5. Current Challenges Facing Economy -
	47.00.0000		Poverty , Human Capital Formation
11	17.08.2020	28.08.2020	5. Current Challenges Facing Economy -
			Rural Development, Employment and
Devision evels	21.00.0000	04.00.0000	Unemployment
Revision cycle	31.08.2020	04.09.2020	Revision
Exam	07.09.2020	18.09.2020	Mid term Exam

Term	2

Cycle No.	From	То	Торіс
12	21.09.2020	01.10.2020	5. Current Challenges Facing Economy - Infrastructure, environment and sustainable development
13	05.10.2020	16.10.2020	<ol> <li>8. Government Budget</li> <li>9. Foreign Exchange Rate</li> </ol>
14	19.10.2020	30.10.2020	<ul><li>10. Balance of payment</li><li>Indian Economics</li><li>6. Development Experience of India</li><li>Pakistan and China</li></ul>
15	02.11.2020	20.11.2020	Development Experience of India Pakistan and China(contd)
16	23.11.2020	04.12.2020	Revision
Revision Cycle	07.12.2020	14.12.2020	Revision
Pre Boards I & result	11.12.2020	30.12.2020	
Pre Boards II	06.01.2020	15.01.2020	

# **Political Science**

Political Science is the way of life, morally, socially and legally.

# Term 1

Cycle No.	From	То	Торіс	
1	02.03.2020	13.03.2020	1. Cold War	
2	16.03.2020	27.03.2020	2. End of Bipolarity	
3	30.03.2020	09.04.2020	3. New Centres of Power	
4	13.04.2020	24.04.2020	<ol><li>New Centres of Power</li></ol>	
5	27.04.2020	08.05.2020	Additional Reference Material by CBSE	
6	11.04.2020	29.04.2020	Revision ofor Interim Exams	
	INTERIM EXAMS 29.06.2020- 03.07.2020			
8	06.07.2020	17.07.2020	<ol> <li>South Asia and the Contemporary World</li> </ol>	
9	20.07.20202	30.07.2020	6. Globalization	
10	04.08.2020	14.08.2020	Revision of First Book	
11	17.08.2020	28.08.2020	Book 2 - 1. Challenges of Nation	
			Building	
Revision cycle	31.08.2020	04.09.2020	Revision	
Exam	07.09.2020	18.09.2020	Mid term Exam	

Cycle No.	From	То	Торіс
12	21.09.2020	01.10.2020	2. Planned Development
13	05.10.2020	16.10.2020	3. India's Foreign Policy
14	19.10.2020	30.10.2020	<ul><li>4. Parties and the Party Systems in</li><li>India</li><li>5. Democratic Resurgence</li></ul>
15	02.11.2020	20.11.2020	<ul><li>5. Democratic Resurgence</li><li>6. Indian Politics: Trends and</li><li>Developments</li></ul>
16	23.11.2020	04.12.2020	Revision
Revision Cycle	07.12.2020	14.12.2020	Revision
Pre Boards I & result	11.12.2020	30.12.2020	
Pre Boards II	06.01.2020	15.01.2020	

# Legal Studies

Law is a three step ladder; Learning law is the first step, Knowing the law is a progress and the last is using it as a tool of social engineering.

Cycle No.	From	То	Торіс
1	02.03.2020	13.03.2020	1. Judiciary
2	16.03.2020	27.03.2020	1. Judiciary
3	30.03.2020	09.04.2020	2. Topics of Law
4	13.04.2020	24.04.2020	<ol><li>Topics of Law – Property,</li></ol>
			Contract
5	27.04.2020	08.05.2020	Topics of Law- Criminal Law
6	11.04.2020	29.04.2020	4. Arbitration
	INTERIM EXA	MS 29.06.20	20- 03.07.2020
8	06.07.2020	17.07.2020	5. Human Rights
9	20.07.20202	30.07.2020	Human Rights
10	04.08.2020	14.08.2020	6. International Context
11	17.08.2020	28.08.2020	Revision
Revision cycle	31.08.2020	04.09.2020	Revision
Exam	07.09.2020	18.09.2020	Mid term Exam

#### Term 1

Cycle No.	From	То	Торіс
12	21.09.2020	01.10.2020	7. Legal Service
13	05.10.2020	16.10.2020	Revision of Unit 1 & 2
14	19.10.2020	30.10.2020	Revision of Unit 3 & 4
15	02.11.2020	20.11.2020	Revision of Unit 5 & 6
16	23.11.2020	04.12.2020	Revision – Sample Papers
Revision Cycle	07.12.2020	14.12.2020	Revision
Pre Boards I & result	11.12.2020	30.12.2020	
Pre Boards II	06.01.2020	15.01.2020	

**Psychology** <u>"Education is what survives when what has been learned has been forgotten."</u> B. F. Skinner

# Term 1

Cycles	Dates From	Dates To	Grade 12
1	02.03.2020	27.03.2020	Variations in Psychological Attributes
2	30.03.2020	09.04.2020	Self and Personality
3	13.04.20	24.04.2020	Self and Personality
4	27.04.2020	08.05.2020	Meeting Life Challenges
5	11.05.2020	29.05.2020	Meeting Life Challenges and Psychological Disorders
	29.06.2020	03.07.2020	Interim Examinations
6	06.07.2020	17.07.2020	Psychological Disorders and Therapeutic Approaches
7	20.07.2020	30.07.2020	Therapeutic Approaches & Attitude and Social Cognition
8	04.08.2020	14.08.2020	Attitude and Social Cognition
9	17.08.2020	28.08.2020	Revision
10	31.08.2020	04.09.2020	Revision
	07.09.2020	18.09.2020	Mid Term Examination

Cycles	Dates From	Dates To	Grade 12
11	21.09.2020	01.10.2020	Revision 1- Chapter 1- Variations
			in Psychological Attributes and
			Chapter 2- Self and Personality
12	05.10.2020	16.10.2020	Revision 2- Chapter 3- Meeting
			Life Challenges and Chapter 4-
			Psychological Disorders
13	19.10.2020	30.10.2020	Revision 3- Chapter 5-
			Therapeutic Approaches, Chapter
			6- Attitude, and Chapter 7- Group
			Processes
14	02.11.2020	20.11.2020	Revision- Chapter 1 to 4
15	23.10.2020	04.12.2020	Revision- Chapter 5 to 7
16	07.12.2020	10.12.2020	Revision
	11.12.2020	24.12.2020	Pre- Boards 1
	06.01.2021	15.01.2021	Pre- Boards 2
	18.01.2021	20.01.2021	Result and Discussion

# **Painting** "I dream my painting and I paint my dream."

Vincent Willem van Gogh

Term 1

Cycle No.	From	То	Торіс
1	20.04.2020	08.05.2020	study about period and location ,study of following paintings:-wizards dance ,Bhimbetthaka
2	11.05.2020	29.05.2020	<ol> <li>Period and Location.</li> <li>Extension: In about 1500 miles.</li> <li>Harappa &amp; Mohenjo-daro (Now in Pakistan)</li> <li>Ropar, Lothal, Rangpur, Alamgirpur, Kali</li> <li>Bangan,</li> <li>Banawali and Dholavira (in India</li> </ol>
Extra Classes	29.06.2020-	03.07.2020	
3	06.07.2020	17.07.2020	Dancing girl, Male Torso, Mother Goddess
4	20.07.2020	30.07.2020	posters
5	04.08.2020	14.08.2020	General Introduction to Art during Mauryan, Shunga, Kushana,(Gandhara and Mathura styles) and Gupta period:
6	17.08.2020	28.08.2020	nature sceneries Dwawings
7 Revision Cycle	31.08.2020	04.09.2020	Lion Capital from Sarnath, Chauri Bearer from Didar Ganj (Yakshi, Seated Buddha from Katra Mound, Mathura, Jain Tirathankara
Mid term Exam	07.09.2020	18.09.2020	painting and drawings
		Тол	

Cycle No.	From	То	Торіс
8	21.09.2020	01.10.2020	Descent of Ganga , Mahabalipuram, Trimuti Lakshmi Narayana
9	05.10.2020	16.10.2020	Introduction to Indian Bronzes and Method of casting (solid and hollow)
10	19.10.2020	30.10.2020	Nataraj (Chola period Thanjavur Distt.,Tamil Nadu)
11	02.11.2020	20.11.2020	Qutub Minar, Delhi and Gol Gumbad of Bijapur
12	23.11.2020	04.12.2020	practical
13	07.12.2020	24.12.2020	practical
14	06.01.2021	15.01.2021	practical
15	18.01.2021	29.01.2021	practical
Revision cycle	01.02.2021	05.02.2021	Revision and practice
Final exams	8.02.2021	19.02.2021	Revision and practice
Result Discussion	22.02.2021	26.02.2021	
Final exams	08.02.2021	19.02.2021	
Result Discussion	22.02.2021	26.02.2021	

# **Physical Education**

# Theory

Max. Marks 70

#### Unit I: Planning in Sports

- Meaning & Objectives of Planning
- Various Committees & its Responsibilities (pre; during & post)
- Tournament Knock-Out, League or Round Robin & Combination
- Procedure to Draw Fixtures Knock-Out (Bye & Seeding) & League (Staircase & Cyclic)

#### Unit II: Sports & Nutrition

- Balanced Diet & Nutrition: Macro & Micro Nutrients
- Nutritive & Non-Nutritive Components of Diet
- Eating for Weight Control A Healthy Weight, The Pitfalls of Dieting, Food Intolerance & Food Myths

#### Unit III: Yoga & Lifestyle

- Asanas as preventive measures
- Obesity: Procedure, Benefits & contraindications for Vajrasana, Hastasana, Trikonasana, Ardh Matsyendrasana
- Diabetes: Procedure, Benefits & contraindications for Bhujangasana, Paschimottasana, Pavan Muktasana, Ardh Matsyendrasana
- Asthema: Procedure, Benefits & contraindications for Sukhasana, Chakrasana, Gomukhasana, Parvatasana, Bhujangasana, Paschimottasana, Matsyasana
- Hypertension: Tadasana, Vajrasana, Pavan Muktasana, Ardha Chakrasana, Bhujangasana, Sharasana

#### Unit IV: Physical Education & Sports for CWSN (Children With Special Needs - Divyang)

- Concept of Disability & Disorder
- Types of Disability, its causes & nature (cognitive disability, intellectual disability, physical disability)
- Types of Disorder, its cause & nature (ADHD, SPD, ASD, ODD, OCD)
- Disability Etiquettes
- Strategies to make Physical Activities assessable for children with special need.

#### Unit V Children & Women in Sports

- Motor development & factors affecting it
- Exercise Guidelines at different stages of growth & Development
- Common Postural Deformities Knock Knee; Flat Foot; Round Shoulders; Lordosis, Kyphosis, Bowlegs and Scoliosis and their corrective measures
- Sports participation of women in India

#### Unit VI: Test & Measurement in Sports o Motor Fitness Test –

 50 M Standing Start, 600 M Run/Walk, Sit & Reach, Partial Curl Up, Push Ups (Boys), Modified Push Ups (Girls), Standing Broad Jump, Agility – 4x10 M Shuttle Run

- Measurement of Cardiovascular Fitness Harvard Step Test/Rockport Test Computation of Fitness Index: Duration of the Exercise in Seconds x 100 5.5 x Pulse count of 1-1.5 Min after Exercise
- Rikli & Jones Senior Citizen Fitness Test
  - (a). Chair Stand Test for lower body strength
  - (b). Arm Curl Test for upper body strength
  - (c). Chair Sit & Reach Test for lower body flexibility
  - (d). Back Scratch Test for upper body flexibility
  - (e). Eight Foot Up & Go Test for agility
  - (f). Six Minute Walk Test for Aerobic Endurance

#### Unit VII: Physiology & Injuries in Sports

- Physiological factor determining component of Physical Fitness
- Effect of exercise on Cardiorespiratory System
- Effect of exercise on Muscular System
- Sports injuries: Classification (Soft Tissue Injuries: (Abrasion, Contusion, Laceration, Incision, Sprain & Strain) Bone & Joint Injuries: (Dislocation, Fractures: Stress Fracture, Green Stick, Communated, Transverse Oblique & Impacted) Causes, Prevention& treatment
- First Aid Aims & Objectives

#### Unit VIII: Biomechanics & Sports

- Meaning and Importance of Biomechanics in Sports
- Types of movements (Flexion, Extension, Abduction & Adduction)
- Newton's Law of Motion & its application in sports

#### Unit IX: Psychology & Sports

- Personality; its definition & types Trait & Types (Sheldon & Jung Classification) & Big Five Theory
- Motivation, its type & techniques
- Meaning, Concept & Types of Aggressions in Sports

#### Unit X: Training in Sports

- Strength Definition, types & methods of improving Strength Isometric, Isotonic & Isokinetic
- Endurance Definition, types & methods to develop Endurance Continuous Training, Interval Training & Fartlek Training
- Speed Definition, types & methods to develop Speed Acceleration Run & Pace Run
- Flexibility Definition, types & methods to improve flexibility
- Coordinative Abilities Definition & types

## Practical

## Max. Marks 30

01. Physical Fitness Test - 6 Marks

02. Proficiency in Games and Sports (Skill of any one Game of choice from the given list\*)- 7 Marks

03. Yogic Practices - 7 Marks

04. Record File \*\* - 5 Marks

05. Viva Voce (Health/ Games & Sports/ Yoga) - 5 Marks \* Basketball, Football, Kabaddi, Kho-Kho, Volleyball, Handball, Hockey, Cricket, Bocce & Unified Basketball [CWSN (Children With Special Needs - Divyang)]

\*\*Record File shall include:

Practical-1: Fitness tests administration for all items.

Practical-2: Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.

Practical-3: Any one game of your choice out of the list above. Labelled diagram of field & equipment (Rules, Terminologies & Skill)