

OPG WORLD SCHOOL (2020-21)

CLASS XII

SYLLABUS BREAK-UP



S.No.	Subject	Syllabus
1	English	<p>Flamingo (Prose)</p> <ol style="list-style-type: none">1. The Last lesson2. Lost spring3. Deep Water4. The Rattrap5. Indigo6. Poets and Pancakes7. The Interview- Part I & II8. Going places <p>Flamingo (Poetry)</p> <ol style="list-style-type: none">1. My mother at sixty-six2. An Elementary School Classroom in a Slum3. Keeping quiet4. A Thing of Beauty5. A Roadside Stand6. Aunt Jennifer's Tigers <p>Vistas</p> <ol style="list-style-type: none">1. The Third Level2. The Tiger King3. Journey to the end of the Earth4. The Enemy5. Should wizard hit mommy6. On the face of it7. Evans tries an O-level8. Memories of Childhood <p>Writing</p> <ol style="list-style-type: none">1. Notice writing2. Advertisement3. Poster making4. Invitation and replies5. Formal Letter- types include application for a job, Letters to the editor (giving suggestions or opinion on issues of public interest), Business or official letters (for making enquiries, registering complaints, asking for and giving information, placing orders and sending replies)

		6. Article writing 7. Speech writing 8. Debate writing 9. Report writing Unseen Passage- Factual, Literary or Description
2	Psychology	Chapter 1- Variations in psychological attributes Chapter 2- Self and personality Chapter 3- Meeting life challenges Chapter 4- Psychological disorders Chapter 5- Therapeutic Approaches Chapter 6- Attitude and Social Cognition Chapter 7- Social influence and Group processes Chapter 8- Psychology and life Chapter 9- Developing Psychological skills
3	History	Book-I-Themes in Indian History Part-I Ch-1 Bricks, Beads and Bones Ch-2 Kings, Farmers and Towns Ch-3 Kinship, Caste and Class Ch-4 Thinkers, Beliefs and Buildings Book-II- Themes in Indian History Part-II Ch-5 Through the eyes of the Travelers Ch-6 Bhakti-Sufi Traditions Ch-7 An Imperial Capital-Vijayanagara Ch-8 Peasants, Zamindars and the State Ch-9 Kings and Chronicles Book-III- Themes in Indian History Part-III Ch-10 Colonialism and the Countryside Exploring Ch-11 Rebels and the Raj Ch-12 Colonial Cities Ch-13 Mahatma Gandhi and the Nationalist Movement Ch-14 Understanding Partition Ch-15 Framing the Constitution
4	Political Science	Part A: Contemporary World Politics 1. Cold War Era and Non-aligned Movement 2. The End of Bipolarity 3. New Centers of Power 4. South Asia and the Contemporary World 5. United Nations and its Organizations 6. Security in Contemporary World 7. Environment and Natural Resources 8. Globalization Part B: Politics in India Since Independence

		<p>9. Challenges of Nation-Building</p> <p>10. Planning and Development</p> <p>11. India's Foreign Policy</p> <p>12. Parties and the Party Systems in India</p> <p>13. Democratic Resurgence</p> <p>14. Social and New Social Movements in India</p> <p>15. Regional Aspirations</p> <p>16. Indian Politics: Trends and Developments</p>
5	Economics	<p><u>Part-A: Introductory Macroeconomics</u></p> <p>1. National Income & Related Aggregates.</p> <p>2. Money Banking.</p> <p>3. Determination of Income & Employment.</p> <p>4. Government Budget & The Economy.</p> <p>5. Balance of Payments.</p> <p><u>Part-B: Indian Economic Development</u></p> <p>6. Development Experience (1947-90) & Economic Reforms since 1991.</p> <p style="padding-left: 20px;">I- Ch-1 Indian Economy on the Eve of Independence</p> <p style="padding-left: 20px;">II- Ch-2 Indian Economy 1950-1990</p> <p style="padding-left: 20px;">III- Economic Reforms since 1991</p> <p>7. Current Challenges Facing Indian Economy.</p> <p style="padding-left: 20px;">I- Ch-4 Poverty</p> <p style="padding-left: 20px;">II- Ch-5 Human Capital Formation in India</p> <p style="padding-left: 20px;">III- Ch-6 Rural Development</p> <p style="padding-left: 20px;">IV- Ch-7 Employment- Growth Informalization and other issues</p> <p style="padding-left: 20px;">V- Ch-8 Infrastructure</p> <p style="padding-left: 20px;">VI- Ch-9 Environment and Sustainable Development</p> <p>8. Development Experience of India-A Comparison with Neighbours</p> <p style="padding-left: 20px;">Ch-10 Comparative Development experiences of India and neighbours</p>
6	Computer Science	<p>Chapter 1: Python Revision Tour</p> <p>Chapter 2: Python Revision Tour -II</p> <p>Chapter 3: Working with Functions</p> <p>Chapter 4: Using Python Libraries</p> <p>Chapter 5: File Handling</p> <p>Chapter 6: Recursion</p> <p>Chapter 7: Idea of Algorithmic Efficiency</p> <p>Chapter 9: Data Structures: Stacks using Lists.</p> <p>Chapter 10: Computer Networks - I</p> <p>Chapter 11: Computer Networks - II</p> <p>Chapter 12: MySQL SQL Revision Tour</p> <p>Chapter 13: More on SQL</p> <p>Chapter 15: Interface python with MySql</p>
7	Informatics Practices	<p>UNIT 1: Data Handling using Pandas and Data Visualization</p> <p>UNIT 2: Database query Using SQL</p> <p>UNIT 3: Computer Networks</p> <p>UNIT 4: Societal Impacts</p>

8	Physical Education	<p>Unit I Planning in Sports</p> <ul style="list-style-type: none"> ● 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) <p>Unit II Sports & Nutrition</p> <ul style="list-style-type: none"> ● 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 <p>Unit III Yoga & Lifestyle</p> <ul style="list-style-type: none"> ● Asanas as preventive measures ● Obesity: Procedure, Benefits & contraindications for Vajrasana, Hastasana, Trikonasana, Ardhamatseyendrasana ● Diabetes: Procedure, Benefits & contraindications for Bhujangasana, Paschimottasana, Pavan Muktasana, Ardhamatseyendrasana ● Asthma: Procedure, Benefits & contraindications for Sukhasana, Chakrasana, Gomukhasana, Parvatasana, Bhujangasana, Paschimottasana, Matsyasana ● Hypertension: Tadasana, Vajrasana, Pavan Muktasana, Ardha Chakrasana, Bhujangasana, Sharasana <p>Unit IV Physical Education & Sports for CWSN (Children With Special Needs - Divyang)</p> <ul style="list-style-type: none"> ● 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 accessible for children with special needs. <p>Unit V Children & Women in Sports</p> <ul style="list-style-type: none"> ● Motor development & factors affecting it ● Exercise Guidelines at different stages of growth & Development ● Common Postural Deformities - Knock Knee; Flat Foot; Round Shoulders; Lordosis, Kyphosis, Bow Legs and Scoliosis and their corrective measures ● Sports participation of women in India <p>Unit VI Test & Measurement in Sports</p> <ul style="list-style-type: none"> ● 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 Cardio Vascular 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 <ol style="list-style-type: none"> 1. Chair Stand Test for lower body strength 2. Arm Curl Test for upper body strength
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3. Chair Sit & Reach Test for lower body flexibility
4. Back Scratch Test for upper body flexibility
5. Eight Foot Up & Go Test for agility
6. Six Minute Walk Test for Aerobic Endurance

Unit VII Physiology & Injuries in Sports

- Physiological factors determining the component of Physical Fitness
- Effect of exercise on Cardiovascular 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, Comminuted, 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

9	Painting	<p>1. The Rajasthani and Pahari Schools of Miniature Painting (16th Century A.D. to 19th Century A.D.)</p> <p>2. The Mughal and Deccan Schools of Miniature Painting (16th Century AD to 19th Century A.D.)</p> <p>3. The Bengal School of Painting and the Modern Trend in Indian Art (About the beginning to mid of the 20th Century)</p>
10	Physics	<p>Chapter–1: Electric Charges and Fields</p> <p>Chapter–2: Electrostatic Potential and Capacitance</p> <p>Chapter–3: Current Electricity</p> <p>Chapter–4: Moving Charges and Magnetism</p> <p>Chapter–5: Magnetism and Matter</p> <p>Chapter–6: Electromagnetic Induction</p> <p>Chapter–7: Alternating Current</p> <p>Chapter–8: Electromagnetic Waves</p> <p>Chapter–9: Ray Optics and Optical Instruments</p> <p>Chapter–10: Wave Optics</p> <p>Chapter–11: Dual Nature of Radiation and Matter</p> <p>Chapter–12: Atoms</p> <p>Chapter–13: Nuclei</p> <p>Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits</p>
11	Chemistry	<p>Unit I The Solid states</p> <p>Unit II Solutions</p> <p>Unit III Electrochemistry</p> <p>Unit IV Chemical Kinetics</p> <p>Unit V Surface Chemistry</p> <p>Unit VI General Principle and extraction of elements</p> <p>Unit VII p-Block Elements</p> <p>Unit VIII d -and f -Block Elements</p> <p>Unit IX Coordination Compounds</p> <p>Unit X Haloalkanes and Haloarenes</p> <p>Unit XI Alcohols, Phenols and Ethers</p> <p>Unit XII Aldehydes, Ketones and Carboxylic Acids</p>

		<p>Unit XIII Organic Compounds containing Nitrogen</p> <p>Unit XIV Biomolecules</p> <p>Unit XV Polymers</p> <p>Unit XVI Chemistry in everyday life</p>
12	Mathematics	<p>Chapter 1 Relations and Functions</p> <p>Chapter 2 Inverse Trigonometric Functions</p> <p>Chapter 3 Matrices Chapter 4 Determinants</p> <p>Chapter 5 Continuity and Differentiability</p> <p>Chapter 6 Application of Derivatives</p> <p>Chapter 7 Integrals</p> <p>Chapter 8 Application of Integrals</p> <p>Chapter 9 Differential Equations</p> <p>Chapter 10 Vector Algebra</p> <p>Chapter 11 Three-Dimensional Geometry</p> <p>Chapter 12 Linear Programming</p> <p>Chapter 13 Probability</p>
13	Business Studies	<p>CH-1 Nature and Significance of Management</p> <p>CH-2 Principles of Management</p> <p>CH-3 Business Environment</p> <p>CH-4 Planning</p> <p>CH-5 Organizing</p> <p>CH-6 Staffing</p> <p>CH-7 Directing</p> <p>CH-8 Controlling</p> <p>CH-9 Marketing Management</p> <p>CH-10 Financial Management</p> <p>CH-11 Financial Markets</p> <p>CH-12 Consumer Protection</p>
14	Accountancy	<p>CH-1 Accounting for Not-for-Profit Organization</p> <p>CH-2 Fundamentals of Partnership Firm</p> <p>CH-3 Goodwill: Nature and Valuation</p> <p>CH-4 Change in Profit-Sharing Ratio Among the Existing Partners</p> <p>CH-5 Admission of a Partner</p> <p>CH-6 Retirement/Death of a Partner</p> <p>CH-7 Dissolution of a Partnership Firm</p> <p>CH-8 Company Accounts – Issue of Shares</p> <p>CH-9 Company Accounts--Issue of Debentures</p> <p>CH-10 Company Accounts--Redemption of Debentures</p> <p>CH-11 Financial statement of a Company</p> <p>CH-12 Analysis of Financial Statement</p> <p>CH-13 Tools for Financial Statement Analysis</p> <p>CH-14 Ratio Analysis</p> <p>CH-15 Cash Flow Statement</p>

15	Home Science	<p>Ch 1 Work, livelihood and Career Ch 2 Clinical Nutrition and Dietetics Ch 3 Public Nutrition and Health Ch 4 Catering and Food Service Management Ch 5 Food Processing and Technology Ch 6 Food Quality and Food Safety Ch 7 Early Childhood Care and Education Ch 8 Special Education and Support Services Ch 9 Management of Support Services, Institutions and Programmes for Children, Youth and Elderly Ch 10 Design for Fabric and Apparel Ch 11 Fashion Design and Merchandising Ch 12 Production and Quality Control in the Garment Industry Ch 13 Care and Maintenance of Fabrics in Institutions Ch 14 Human Resource Management Ch 15 Hospitality Management Ch 16 Consumer Education and Protection Ch 17 Development Communication and Journalism Ch 18 Media Management Design and Production</p>
16	Biology	<p>Chapter-1: Reproduction in organisms Chapter-2: Sexual Reproduction in Flowering Plants Chapter-3: Human Reproduction Chapter-4: Reproductive health Chapter-5: Principles of Inheritance and Variation Chapter-6: Molecular Basis of Inheritance Chapter-7: Evolution Chapter-8: Human Health and diseases Chapter-9: Strategies for enhancement in food production Chapter-10: Microbes in Human Welfare Chapter-11: Biotechnology – Principles and Processes Chapter-12: Biotechnology and its Application Chapter-13: Organisms and Populations Chapter-14: Ecosystem Chapter-15: Biodiversity and its Conservation Chapter-16: Environmental issues</p>
17	Applied Mathematics	<p>UNIT I. Numbers, Quantification and Numerical Applications UNIT II. Algebra UNIT III. Inferential Statistics UNIT IV. Index Numbers and Time-based data UNIT V. Calculus UNIT VI. Financial Mathematics UNIT VII. Linear Programming UNIT VIII. Probability</p>

*Syllabus may change