SYLLABUS 2019-20 CLASS - 12

Content

Chemistry- 12ᵗʰ (Science)

S.N.	Month	Topic	Sub Concept	Activity
1	April	Ch-1 The Solid State	- General characteristics - Amorphous & Crystaline - Classification of Crystaline solids - Crystal Lattice & Unit cell - No.of Atoms in Unitcell - Close packed structures - Packing Efficiency - Calculation Involving U.C - Imperfaction in Solids - Electrical Properties - Magnetic properties	- Lab & Videos
		Ch-10 Haloalkanes & Haloarenes	- Classification - Nomenclature - Nature of C-X bond - Methods of preparation of Haloalkanes - Preparations - Physical properties - Chemical Reactions	- Lab & Videos
2	June	Ch-2 Solutions	- Types of solutions & Concentration - Solubility - V.P of Liquid solution - Ideal & Non-Ideal solution - Colligative properties - Abnormal molar mass.	- Lab & Videos
		Ch-11 Alcohols, phenol & Ethers	- Classification & Nomenclature - Structures & F.G - Alcohol & Phenols - Ethers	- Lab & Videos
3	July	Ch-3 Electro chemistry	- Electrochemical cells - Galvanic cells & Nernest Eq. - Conductance of electrolytic sol. - Electrolytic cell & Electrolysis - Batteries ,Fuel cell, Corrosion	- Lab & Videos
		Ch-12 Aldehydes ketones & carboxylic Acids	- Nomenclature & Structure - Preparation of Aldehyde & ketone & Uses - Physical & chemical Reaction - Methods of preparation of carboxylic Acids & its physical & chemical Reactions & Uses	- Lab & Videos
4	Aug	Ch-4 Chemical Kinetics	- Rate & Factors of Reaction. - Integrated Rate Equation - Pseudo first order Reaction - Temperature dependance of the rate of a Reaction - Collision theory	- Lab & Videos
		Ch-13 Amines	- Structure, classification	- Lab & Videos

Chemistry- 12th (Science)

S.N.	Month	Topic	Sub Concept	Activity
			- Nomenclature, Preparation - Physical & Chemical properties - Methods of Preparation of Diazonium salts & importance	
5	Sept	Ch-5 Surface chemistry Ch-14 Biomolecules	- Adsorption & Catalysis - Classification of colloids colloids around us - Emulsions - Carbohydrates, protiens & Enzymes - Vitamins, Nucleic Acids & Hormones	- Lab & Videos - Lab & Videos
6	Oct	Ch-6 General Principles & Process of Isolation of Elements	- Occurrence of metals - Concentration of ores - Extraction of Crude metal - Thermodynamic C Principle of metallurgy - Electrochemical principle of metallurgy - Oxidation-Reduction, Refining & Uses - Classification & Types of Reactions	- Lab & Videos
7	Nov	Ch-15 Polymers Ch-7 The P-block Elements	- Classification & Type of Reactions - Molecular mass of polymers - Biodegradable polymers - Polymers of commercial importance - 15 to 18 Groups Elements & their compounds : Physical & chemical properties & uses	- Lab & Videos - Lab & Videos
8	Dec	Ch-8 d & f-block Elements Ch-9 Co-ordination compounds	- Position & Electronic configuration - General Properties - Some important compounds - Lanthanoid & Actinoids - Some Application of d & F block - Werner's Theory - Nomenclature & Isomerism - Bonding & Stability - Importance & Applications	- Lab & Videos - Lab & Videos
9	Jan	Ch-16 Chemistry in every day life	- Drugs & their classification -Drug-Target Interaction -Therapeutic Action - Revision & Doubt solving	- Lab & Videos
10	Feb	Revision & Doubt solving	-Chemical is in Food d & cleansing agents	
11	March	Board Exam	-	

Maths- 12th (Sci)

S.N.	Month	Topic	Sub Concept	Activity
1	April	**(Sem-1 Textbook)** Ch - 3 Matrices Ch - 4 Determinants	-	-
2	Jun	Ch - 1 Relations and Functions Ch - 2 Inverse Trigonometric Functions		
3	July	Ch - 5 Continuity and differenti-ability Ch - 6 Application of Derivatives		
4	Aug	Ch - 7 Integrals (Sem-2 Textbook)		
5	Sep	Ch - 8 Application of Integrals Ch - 9 Differential Equations		
6	Oct	Ch - 9 Differential Equations		
7	Nov	Ch - 13 Probability Ch - 10 Vector Algebra		
8	Dec	Ch - 11 Three Dimensional Geometry Ch - 12 Linear Programming		

English-12

S.N.	Month	Topic	Sub Concept	Activity
1	April	- The Third level	-Psychiatrist friend sam weiner, hidden third level to Galesburg	-Write a suspence story
		-Transformation of sentences	- Inter change of sentence, rules, V3 form	- Solve the exercise
		-Do as Directed	-Change as per instructions given in end	- rule chart
2	June	- The last lesson	- Franz late at school-M.Hamel last day in school, emotional conversation	- Diary writing- "memo-rable days of school life"
		- My Mother at Sixty-Six	- appearance of the writer's mother, parting from each other, highly emo-tional farewell	- Note making- "Mothers as second God"
		- Prose and poem comprehension	- Reading, meaning summary	- Solve exercise
3	July	- Lost Spring	- Saheb's struggle for his survival, Two distinct world of families	- Discussion on poverty and caste / religion
		- An Elementary school classroom in a slum	- Pathetic scenario of slum school, the unsuitable environment, should be set free from obstacles	- Debate slumschool/ Vs city schools
		- The Tiger king	- Maharaja fond of hunting tigers, astrologers had fore told his death would occur from the Tiger	- Write a story where animal characters are used
		- Note making and summarising	- Pick important points and collect highlighted things	- Format
4	Aug	- Deep water	- William Douglas recalls a misadven-ture of childhood, boys threw him in pool and chocked his senses	- Jot down your own shocking experience of life
		- Keep Quiet	- Poet wants to stops all kinds of war, long silence can soothe our feelings and remove sadness	- Deep meaning of peom
		- Journey to the End of the Earth	- The "Students on Ice" programme by Geoff Green India and Antarctica were part of same land mass description of Antarctica	- Write report on "Ant-arctica"
		- Advertisement Notice writing	- Promotion of product, property, etc - Conveying over all message	- Box format
5	Sep	- The Rattrap	- A man sold small rattraps of wire, struck by an idea as whole world like a big rat trap and anyone tempted to touch bait, rattrap closed	- Picture story
		- A thing of beauty	- John keats about beauty, never fades, source of happiness	-Write poem on "Nature"
		- The Enemy	- Japanese coast, Dr Sadao Hoki, wife Hana, Spot white enemy, wounded treated him, humanity first	- Report on "World war"

English-12

S.N.	Month	Topic	Sub Concept	Activity
		- Posters - Invitation letters	- Commercial promotion - Business, official, personal invitation	- Follow format
6	Oct	- Indigo - A Road side stand	- Historical event of peasant from champaran Gandhiji's Satyagraha - Miserable condition of the poor rural people, charity, sympathy	- Picture sticking
7	Nov	- Should wizard Hit mommy ? - Letter writing - Aunt Jennifer's Tigers	- A difficult question, It was not Roger's mommy hit the wizard but the wizard who hit mommy - Personal / Official - An ironical approch that a lady who has not yet freed herself from past bitter experiences, creates sleek and prancing tigers	- Video clip on fairy tale - Format - Note writing "Tigers"
8	Dec	- On the face of it - Application for Job - Poets and Pancakes - The Interview - Evans Tries an O- Level - Memories of Childhood	- The play depicts the disappointment and loneliness of a physically impaired person - Biodata, personal details, academic - It is a part taken from book 'My years with Boss", shows events and personalities in film of Indian cinema - Highlights some of the positive points about interview and why celebrity writers despise being interviewed - Deals with crime and punishment, James Evan is Jail-bird, escaped from prison three times - It is autobiographical episodes from the lives of two women who belong to communities of secondary importance	- Role Play - format - Documentary film on Indian cinema - Interview of any personallity (Survey) - Role play - Jot any childhood memory
9	Jan	- Article writing - Speech writing - Report - Going places - Visual analysis - Exam	- News paper - Welcoming, farewell school function, magazine - Barton explores the theme of adolescent fantasising and hero worship, teenagers unrealistic dreams. - Bar, diagram, piechart - Brain storming exercises Revision Test	- Format - Write any film of sports icon information - Elaborate given picture - Worksheet last year Ques papers

GSEB STD-12 BIOLOGY

Sr.No	Month	Topic	Sub Topic	Activity
1	April	Ch.1 Reproduction in Organisms Ch.2 Sexual Reproduction in Flowering Plants Ch.4 Reproductive Health	- Asexual Reproduction - Sexual Reproduction -Flower-A Fascinating Organ of Angiosperms -Pre –fertilization: Structures and Events -Double Fertilization -Post-fertilization :Structure and Events -Apomixis and polyembryony -Health Problems and Strategies -Population Explosion & Birth Control -Medical Termination of Pregnancy -Sexually Transmitted Diseases -Infertility	Practical in Biology Lab & Videos
2	June	Ch.3 Human Reproduction Ch.5 Principles of Inheritance & Variation	- The Male Reproductive System - The Female Reproductive System - Gametogenesis - Menstrual Cycle - Fertilization & Implantation - Pregnancy & Embryonic Development -Parturition & Lactation - Mendel's Laws of Inheritance - Inheritance of One Gene - Inheritance of Two Genes -Sex Determination -Mutation - Genetic Disorders	Practical in Biology Lab & Videos
3	July	Ch.6 molecular Basis of Inheritance Ch.7 Evolution	- The DNA - The Search for Genetic -RNA World - Replication - Transcription - Genetic Code - Translation -Regulation Of Gene Expression -Human Genome Project - DNA Fingerprinting -Origin of Life - Evolution of Life Forms Theory - What are the Evidences for Evolution? -What is Adaptive Radiation? -Biological Evolution -Mechanism of Evolution - Hardy Weinberg Principle - A Brief Account of Evolution - Origin & Evolution of Man	Practical in Biology Lab & Videos
4	Aug	Ch.8 Human Health & Disease Ch.9 Strategies For Enhancement In Food Production	-Common Diseases in Humans -Immunity -AIDS -Cancer -Drugs & Alcohol Abuse -Animal Husbandry - Plant Breeding -Single Cell Proteins & Tissue Culture	Practical in Biology Lab & Video

5	Sep	Ch.10 Microbes In Human Welfare	- Microbes in Household Products - Microbes in Industrial Products - Microbes in Sewage Treatment - Microbes in Production Of Biogas -Microbes as Biocontrol Agents - Microbes as Biofertilisers	Practical in Biology Lab & Video
		Ch.11 Biotechnology	- Biotechnology: Principles & Processes -Biotechnology & its Applications	
6	Oct	Ch.12 Biotechnology & its Applications	-Biotechnological Applications in Agriculture -Biotechnological Application in Medicine -Transgenic Animals -Ethical Issues	Practical in Biology Lab & Video
		Ch.13 Organisms & Populations	-Organism & Its Environment - Populations	
7	Nov	Ch.13 (Cont.) Ch.14 Ecosystem	 -Ecosystem-Structure & Function -Productivity -Decomposition -Energy Flow - Ecological Pyramids -Ecological Succession -Nutrient Cycling -Ecosystem services	Practical in Biology Lab & Video
8	Dec	Ch.15 Biodiversity & conservation	-Biodiversity -Biodiversity Conservation	Practical in Biology Lab & Video
		Ch.16 Environmental Issues	-Air Pollution & its Control - Water Pollution & its Control - Solid Wastes -Agro-chemical & their effects -Radioactive Wastes - Greenhouse Effect & Global Warming - Ozone Depletion in the Stratosphere - Degradation by Improper Resource Utilization & Maintenance	
9	Jan	Ch.16 (Cont.) Revision	-Radioactive Wastes - Greenhouse Effect & Global Warming - Ozone Depletion in the Stratosphere - Degradation by Improper Resource Utilization & Maintenance	
10	Feb	Revision	-	-
11	Mar	Revision	-	-

STD : 12TH SUB: PHYSICS

Month	Chapters & Topics
April	Ch.1: Electric charges and fields Topics: 1.1 to 1.15 Ch.2: Electrostatic potential & Capacitance Topics: 2.1 to 2.16
June	Ch.3: Current Electricity Topics: 3.1 to 3.16 Ch.4: Moving Charges & Magnetism (half) Topics: 4.1 & 4.2
July	Ch.4: Moving Charges & Magnetism (continue) Topics: 4.3 to 4.11 Ch.5: Magnetism & Matter Topics: 5.1 to 5.7 Ch.6: Electromagnetic Induction Topics: 6.1 to 6.10
August	Ch.7: Alternating Current Topics: 7.1 to 7.9 Ch.8: Electromagnetic Waves Topics: 8.1 to 8.4 Ch.9: Ray Optics & Optical Instruments Topics: 9.1 to 9.9
September	Ch.10: Wave Optics Topics: 10.1 to 10.7 Ch.11: Dual Nature Topics: 11.1 to 11.9 Ch.12: Atoms Topics: 12.1 to 12.6
October	Ch.13: Nuclei Topics: 13.1 to 13.7 Ch.14: Semiconductor Electronics: Materials, Devices & Simple Circuits (half) Topics: 14.1 to 14.6
November	Ch.14: Semiconductor Electronics: Materials, Devices & Simple Circuits (continue) Topics: 14.7 to 14.11
December	Ch.15: Communication Systems Topics: 15.1 to 15.6

Preliminary Exam paper format (Total marks 50)

Section A Question 1 – 10 Do as directed: Fill in the blanks, Match the following, True or false, Difference, Define, Give reason, etc... (10 questions of 1 mark each)

Section B Question 11 – 16 Questions to be answered in short.

(6 questions of 2 mark each)

Section C Question 17 – 22 Numerical based questions.

(6 questions of 3 mark each)

Section D Question 23 – 24 Questions to be answered in detail.

(2 questions of 5 mark each)

Final exam paper format (Total mark 100)

Section A Question 1 – 15 Do as directed: Fill in the blanks, Match the following, True or false, Difference, Define, Give reason, etc... (15 questions of 1 mark each)

Section B Question 16 – 30 Do as directed: 5 Multiple choice questions,

10 Questions to be answered in one sentence. (15 questions of 1 mark each)

Section C Question 31 – 40 Questions to be answered in short.

(10 questions of 2 mark each)

Section D Question 41 – 50 Questions to be answered in short.

(10 questions of 3 mark each)

Section E Question 51 – 54 Questions to be answered in detail.

(4 questions of 5 mark each)

STD 12 COMPUTER

SR.NO	MONTH	TOPIC	SUB TOPIC	ACTIVITY
1	Apr	Ch-1, Creating HTML form using KompoZer	Form Elements, Input elements, Create New File, Opening, saving, adding element in to the form, Display form in preview mode	Creating Registration Form using KompoZer
		Ch-2, Cascading Style Sheet and Java script	Add css using KompoZer, Open CSS, create style rule, Change text, background, check the code in the source view, Java script , Write Java script for validate the form fields, events, functions, if statement, isNAN(), alert, focus(),	Validate the registration form using java script
		Ch-3, Designing simple website using KompoZer	Planning for the website, create simple website, insert table, properties of table, image, create link, publish website, other open source web development tools	Create a small website.
2	Jun	Ch-4, Introduction to E- Commerce	Applications of E-commerce, Traditional commerce, Advantages, Limitations, Business models	Discuss about e-commerce and m-commerce
		Ch-5, Introduction to M- Commerce	Benefits, Limitations, Applications, Security issues, Payment cards	
3	Jul	Ch-6, Object oriented Concepts	Object, Class, Class Diagram, Encapsulation, Data Abstraction, Polymorphism, Aggregation, Composition, Inheritance	Give real world examples of each
		Ch-7, Java Basics	Creating simple Java application, Structure of a JAVA program, data types, variables, Literals, comments, expressions, operators, control structure	
4	Aug	Ch-8, Classes and Objects in JAVA	Class in JAVA, creating objects, class variable and class method, classification of variables declared in a class, polymorphism, constructor, access control, Inheritance, composition and aggregation	
		Ch-9, Working with Array and String	1-D array, 2-D array, strings, different classes	Prepare a simple program for array and string
5	Sep	Ch-10, Exception Handling in JAVA	Types of exceptions, Compile-time errors, Run-time errors, Exception handling, try-catch block, multiple catch block, finally block, throw statement, creating custom exception	Program for exception and file handling
6	Oct	Ch-11, File Handling	File class, constructor of file, methods of file, stream class, writer class, reader class, scanner class, consol class	Prepare the program for File class
7	Nov	Revision of Ch 1 to 11		

SR.NO	MONTH	TOPIC	SUB TOPIC	ACTIVITY
7	Dec	Ch-12, Publishing document using LaTex	The LaTex language, structure of LaTex document, The preamble, The document environment, Page layout, typesetting Mathematical content in LaTex, Using mathematical symbols and operators, Using equations	
		Ch-13, Other useful free tools and services	Data compression, Archive Manager, The VLC media player, Google map, character map, The R software, rational plan, Skype	

Syllabus for Exam:

Whole Book

Paper Style:

MCQ's   **100 Marks**