

ANNUAL ACADEMIC PLAN 2023-2024

MPC-I year

JUNE

<u>ENGLISH</u>	<u>MATHS - A</u>	<u>MATHS-B</u>	<u>PHYSICS</u>	<u>CHEMISTRY</u>
<u>Poetry and Prose</u> Introduction to syllabus (2 hrs) Model paper (2 hrs) <u>Extensive Reading</u> --- <u>Reading / Writing skills</u> Parts of speech (5 hrs) Comprehension (5 hrs) (unseen) <u>Communication skills</u> Silent letters (2 hrs) Odd sounds (3 hrs) Phrasal verbs(3 hrs)	<u>03 Matrices:</u> 3.1 Types of Matrices 3.2 Scalar multiple of a matrix and multiplication of matrices 3.3 Transpose of a matrix 3.4 Determinants 3.5 Adjoint and inverse of matrix 3.6 Consistency and inconsistency of system of simultaneous equations 3.7 Solution of simultaneous line are equations	Syllabus and prerequisites <u>01. Locus</u> 1.1 Definition of locus – Illustrations 1.2 To find equations of locus - Problems connected to it <u>02 Transformation of Axes</u> 2.1 Transformation of axes - Rules, Derivations and Illustrations 2.2 Rotation of axes - Derivations – Illustrations <u>03 .The Straight Line</u> 3.1 Revision of fundamental results 3.2 Straight line - Normal	<u>CHAPTER- I PHYSICAL WORLD</u> 1.1 What is Physics? 1.2 Scope and excitement of physics 1.3 Physics, technology and society 1.4 Fundamental force sinnature 1.5 Nature of physical laws <u>CHAPTER-II UNITS AND MEASUREMENTS</u> 2.1 Introduction 2.2 The International system of units 2.3 Measurement of length 2.4 Measurement of mass 2.5 Measurement of time 2.6 Accuracy, precision of instruments and errors in Measurement 2.7 Significant figures 2.8 Dimensions of Physical Quantities 2.9 Dimensional formulae	Syllabus dictation and discussion of IPE question paper – weightage of marks to each chapter <u>1. ATOMIC STRUCTURE</u> 1.1 Sub – atomic particles 1.2 Atomic models – Rutherford's nuclear model of atom 1.3 Developments leading to the Bohr's model of atom 1.4 Bohr's model for hydrogen atom 1.5 Quantum mechanical considerations of subAtomic particles 1.6 Quantum mechanical model of Atom -Important features of the quantum mechanical.Model of atom – orbitals and quantum numbers Shapes of atomic orbitals – energies of orbitals -Filling of orbitals in atom: Aufbau Principle,Pauli's exclusion principle and Hund's rule of Maximum multiplicity-electronic configurationsOf atoms – stability of completely filled

		form – Illustrations 3.3 Straight line - Symmetric form AP EAPCET classes on locus AP EAPCET classes on Transformation of Axes	and dimensional equations Dimensional analysis and its applications <u>Chapter-III</u> <u>MOTION IN A STRAIGHT LINE</u> 3.1 Introduction 3.2 Position, path length and displacement 3.3 Average velocity and average speed 3.4 Instantaneous velocity and speed Acceleration 3.6 Kinematic equations for uniformly accelerated motion 3.7 Relative velocity	and halfFilled sub shells <u>2. CLASSIFICATION OF ELEMENTS AND PERIODICITY OF PROPERTIES</u> 2.1 Need to classify elements 2.2 Genesis of periodic classification 2.3 Modern periodic law and the present form of the Periodic table 2.4 Nomenclature of elements with atomic number greater than 100 2.5 Electronic configuration of elements and the Periodic table. <u>PRACTICALS: I.</u><u>Acquinttance with Laboratory Equipment:</u> 1.Bunsenburner, Spirit Lamp 2.Basic Laboratory equipment (Burette, pipette, conical flask, volumetric flask, measuring, cylinder, washbottle etc.,) 2.6 Electronic configurations and types of elements: s, p, d, f blocks 2.7 Periodic trends in properties of elements –Trends In physical properties –Periodic trends in chemical properties-Periodic trends and chemical reactivity
ASSIGNMENTS - I				

JULY

<u>Poetry and Prose</u> -Abraham Lincoln's Letter to His Son's Teacher (5 hrs) -Commonwealth of Bees (4 hrs) <u>Extensive Reading</u> The Engine Trouble (3 hrs) <u>Reading / Writing skills</u> Articles (3 hrs) Prepositions (3 hrs) Compreshion (2 hrs) (unseen) <u>Communication skills</u> Vowels Diphthongs Consonants(4 hrs)	<u>01 Functions:</u> 1.1 Types of functions – Definitions 1.2 Inverse functions and Theorems 1.3 Domain, Range, and Inverse of real valued functions <u>02 Mathematical Induction:</u> 2.1 Principles of Mathematical Induction and Theorems 2.2 Applications of Mathematical Induction 2.3 Problems on divisibility	3.4 Straight line - Reduction into various forms 3.5 Intersection of two Straight Lines. 3.6 Family of straight lines - Concurrent lines 3.7 Condition for Concurrent lines. 3.8 Angle between two lines. 3.9 Length of perpendicular from a point to a Line 3.10 Distance between two parallel lines. 3.11 Concurrent lines - properties related to a triangle AP EAPCET classes on Straight lines	<u>CHAPTER-IV: MOTION IN A PLANE</u> 4.1 Introduction 4.2 Scalars and vectors 4.3 Multiplication of vectors by real members 4.4 Addition and subtraction of vectors graphical Method 4.5 Resolution of vectors 4.6 Vector addition Analytical method 4.7 Motion in a plane 4.8 Motion in a plane with constant acceleration 4.9 Relative velocity in two dimensions 4.10 Projectile motion 4.11 Uniform circular motion <u>CHAPTER-V: LAWS OF MOTION</u> 5.1 Introduction 5.2 Aristotle's fallacy 5.3 The law of inertia 5.4 Newton's first law of motion 5.5 Newton's second law of motion 5.6 Newton's third law of motion 5.7 Conservation of momentum 5.8 Equilibrium of a particle	<u>2.7 Periodic trends in properties of elements – Trends</u> In physical properties – Periodic trends in chemical properties-Periodic trends and chemical reactivity <u>3. CHEMICAL BONDING AND MOLECULAR STRUCTURE</u> 3.1 Kossel – Lew is approach to chemical bonding 3.2 Ionic or electrovalent bond Bond parameters VSEPR theory: predicting the geometry of simple molecules 3.5 Valence bond theory 3.6 Hybridisation 3.7 Coordinate bond – definition with examples <u>PRACTICALS:</u>II. Basic Laboratory Techniques 3.8 Molecular orbital theory –Bonding in some homonuclear di atomic molecules 3.10 Hydrogen bonding
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			5.9 Common forces in mechanics, friction 5.10 Circular motion 5.11 Solving problems in mechanics. <u>Practicals</u> 1. vernier callipers 2. Screw gauge	
ASSIGNMENTS – II EAPCET Classes UNIT TEST – 1 (From 26-07-2023 to 28-07-2023)				
AUGUST				
ENGLISH	MATHS - A	MATHS-B	PHYSICS	CHEMISTRY
<u>Poetry and Prose</u> -She Conquered the everest (5 hrs) -This is my Prayer to Thee, My Lord! (4hrs) <u>Extensive Reading</u> The Last Leaf (4 hrs) <u>Reading / Writing skills</u> Verb forms (7 hrs) Transcoding Information (3 hrs)	<u>06 Trigonometric ratios upto Transformations:</u> 6.1 Trigonometric ratios– Variation–Graphs and Periodicity 6.2 Trigonometric ratios of compound angles 6.3 Trigonometric ratios of multiple and sub-multiple angles 6.4 Transformations (Sum and Product	<u>04 Pair of Straight lines</u> 4.1 Equations of pair of lines passing through origin, angle between a pair of lines 4.2 Condition for perpendicular and coincident lines, bisectors of angles 4.3 4.4 Pair of lines - second	<u>CHAPTER-VI: WORK, ENERGY AND POWER</u> 6.1 Introduction 6.2 Notions of work and kinetic energy: The work-energy theorem. 6.3 Work 6.4 Kinetic Energy 6.5 Work done by a variable force 6.6 The work – energy theorem for a variable force 6.7 The concept of Potential energy 6.8 The conservation	<u>4 STATES OF MATTER: GASES AND LIQUIDS</u> 4.1 Inter molecular forces 4.2 Thermal energy 4.3 Inter molecular forces Vs thermal interactions 4.4 The gaseous State. 4.5 The gas Laws 4.6 Ideal gas equation. 4.7 Graham's law of diffusion– Dalton's law of partial pressures 4.8 Kinetic molecular

<u>Communication skills</u> Tramscriptions (3 hrs)	rules)	degree general equation 4.5 Conditions for parallel lines – distance between them, Point of intersection of pair of lines 4.6 Homogenizing a second degree equation with a first degree equation in X and Y AP EAPCET classes on Pair of Straight lines	of mechanical energy 6.9 The Potential energy of a spring 6.10 Various forms of energy : the laws of conservation of energy 6.11 Power 6.12 Collisions	theory of gases 4.9 Kinetic gas equation of an ideal gas (No derivation)–deduction of gas laws from kinetic gas equation 4.10 Distribution of molecular speeds – rms, average and most probable speeds –kinetic energy of gas molecules 4.11 Behaviour of real gases: deviation from ideal gas behavior – compressible factor Vs pressure diagrams of real gases. 4.12 Liquefaction of gases 4.13 Liquid state– properties of liquids in terms of inter molecular interactions – vapour pressure, surface tension and viscosity (Qualitative idea only. No mathematical derivation)
Assignment-III AP EAPCET CLASS ON TRIGONOMETRY				

UNIT TEST-II
(From 24-08-2023 to 26-08-2023)

SEPTEMBER

ENGLISH	MATHS - A	MATHS-B	PHYSICS	CHEMISTRY
<u>Poetry and Prose</u> -Digital Technologies(5 hrs) -As I Grew Older (5 hrs) <u>Extensive Reading</u> The Immaculate Child (3 hrs) <u>Reading / Writing skills</u> Direct & Indirect speech (4 hrs) Transcoding Information (3 hrs) <u>Communication skills</u> Dialogue Writing (3 hrs)	<u>07 Trigonometric Equations:</u> 7.1 General solutions of Trigonometric equations 7.2 Simple Trigonometric equations– Solutions AP EAPCET ON TRIGONOMETRIC EQUATIONS <u>08 Inverse Trigonometric Functions:</u> 8.1 To reduce a Trigonometric function into a bijective function 8.2 Graphs of Inverse Trigonometric functions 8.3 Properties of Inverse Trigonometric functions	<u>05 Three Dimensional Coordinates</u> 5.1 Coordinates 5.2 Section formulas - Centroid of a triangle and tetrahedron 5.3 solved problems <u>06 Direction Cosines and Direction Ratios</u> 6.1 Direction cosines 6.2 Direction Ratios <u>07 Plane</u> 7.1 Cartesian equation of Plane - Simple Illustrations AP EAPCET classes on 3d	<u>CHAPTER-VII SYSTEM OF PARTICLES AND ROTATIONAL MOTION</u> 7.1 Introduction 7.2 Centre of mass. Centre of gravity 7.3 Motion of Centre of mass 7.4 Linear momentum of a system of particles 7.5 Vector product of two vectors 7.6 Angular velocity and its relation with linear velocity <u>Practical's</u> : 3. Physical balance; 1. Simple Pendulum	<u>5 STOICHIOMETRY</u> 5.1 Importance of Chemistry –Some basic concepts– 5.2 Laws of chemical combinations, Gay Lussac's law of gaseous volumes, Dalton's atomic theory, Avogadro's law 5.3 Atomic and molecular masses-mole concept and molar mass concept of equivalent weight 5.4 Percentage composition of compounds and Calculations of empirical and molecular formulae of compounds. 5.5 Stoichiometry and stoichiometric calculations <u>Practicals:</u> III. Purification of Chemical Substances 5.6 Methods of expressing concentrations of solutions 5.7 Redox reactions 5.8 Oxidation number

09 Hyperbolic functions:

9.1 Definitions of
Hyperbolic functions -
Graphs

9.2 Definitions of Inverse
Hyperbolic functions-
Graphs

9.3 Addition formulae of
Hyperbolic functions

coordinates

AP EAPCET classes on drs
and dcs

concept

5.9 Types of Redox
reactions

5.10 Balancing of redox
reactions –oxidation
number method and half
reaction (ion-electron)
method

5.11 Redox reactions in
Titrimetry

6. THERMODYNAMICS

6.1. Thermodynamic terms

6.2 Applications – work –
enthalpy – extensive and
intensive properties – heat
capacity

6.3 Measurement of ΔU
and ΔH : Calorimetry

6.4 Enthalpy change, $\Delta_r H$
of a reaction

6.5 Enthalpies for
different types of reactions

6.6 Spontaneity

6.7 Gibbs energy change
and equilibrium.

6.8 Absolute Entropy and
the third law of

Thermo dynamics

Dussehra Holidays
19.10.2023 to 25.10.2023

AP EAPCET Classes
Assignment-IV

QUARTERLY EXAMINATIONS
16.09.2023–23.09.2023

OCTOBER

ENGLISH	MATHS - A	MATHS-B	PHYSICS	CHEMISTRY
<u>Poetry and Prose</u> -Disaster Management (5 hrs) -Body (5 hrs) <u>Extensive Reading</u> --- <u>Reading / Writing skills</u> Active & Passive Voice (5 hrs) <u>Communication skills</u> Transcription (6 hrs) Syllable (5 hrs)	<u>Properties of Triangles:</u> 10.1 Relation between sides and angle of a triangle 10.2 Sine, Cosine, Tangent, and Projection rules 10.3 Half angle formulae and areas of a triangle 10.4 In-circle and Ex-circle of a triangle	<u>8.Limits and Continuity</u> 8.1 Intervals and neighbourhoods. 8.2 Limits. 8.3 Standard Limits	<u>CHAPTER-VII</u> <u>SYSTEM OF PARTICLES AND ROTATIONAL MOTION</u> 7.7 Torque and angular momentum 7.8 Equilibrium of a rigid body 7.9 Moment of inertia 7.10 Theorems of perpendicular and parallel axis. 7.11 Dynamics of rotational motion about a fixed axis. 7.12 Angular momentum in case of rotations about a fixed axis. 7.13 Rolling motion <u>Chapter – VIII</u> <u>OSCILLATIONS</u> 8.1 Introduction 8.2 Periodic and oscillatory motions 8.3 Simple Harmonic	<u>7.CHEMICAL EQUILIBRIUM AND ACIDS - BASES</u> 7.1 Equilibrium in physical process. 7.2 Equilibrium in chemical process - dynamic Equilibrium 7.3 Law of chemical equilibrium – law of mass action and equilibrium constant 7.4 Homogeneous equilibria, equilibrium constant in Gaseous systems-relationship between K_P and K_c 7.5 Heterogeneous equilibria 7.6 Applications of equilibrium constants <u>Practicals:IV.</u> <u>Experiments related to pHchange</u> <u>V. Chemical equilibrium</u> 7.7 Relationship between equilibrium constant K,

			motions Simple Harmonic motion and uniform circular motion	reaction quotient Q and Gibbs energy G 7.8 Factors affecting Equilibria – Le - chatelier's Principle – Application to industrial synthesis of ammonia and Sulphur trioxide 7.9 Ionic equilibrium in solutions 7.10 Acids, bases and salts - Arrhenius, Bronsted – Lowry and Lewis concepts of acids and bases 7.11 Ionization of acids and bases 7.12 Buffer solutions - designing of buffer solution - preparation of acidic buffer 7.13 Solubility equilibria of sparingly soluble salts solubility product constant, common ion effect On solubility of ionic salts 8 <u>HYDROGEN AND ITS COMPOUNDS</u> 8.1 Position of hydrogen in the periodic table 8.2 Dihydrogen – occurrence and isotopes 8.3 Preparation of dihydrogen 8.4 Properties of
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				dihydrogen 8.5 Hydrides : ionic, covalent and non- stiochiometric Hydrides 8.6 Water: physical properties; structure of water and ice-chemical properties of water; hard and soft water, Temporary and permanent hardness of water 8.7 Hydrogen peroxide: preparation; physical properties; structure and chemical properties; storage and uses Practicals: VI. Quantitative estimation (Volumetric analysis)
Assignment-V				
AP EAPCET CLASSES ON PROP OF TRIANGLES UNIT TEST-III (From 16-10-2023 to 18-10-2023)				
NOVEMBER				
ENGLISH	MATHS - A	MATHS-B	PHYSICS	CHEMISTRY

<u>Poetry and Prose</u> -To a Student (5 hrs) -What Makes a Nation(6 hrs) <u>Extensive Reading</u> Will He Come Home? (2 hrs) <u>Reading / Writing skills</u> Combining Sentences (6 hrs) <u>Communication skills</u> Vocabulary (5 hrs)	<u>04 Addition of Vectors:</u> 4.1 Vector as a triad of real numbers–some basic concepts 4.2 Classification (Types of Vectors) 4.3 Addition of Vectors 4.4 Scalar multiplication of a vector 4.5 Angle between two non-zero vectors 4.6 Linear combination of vectors 4.7 Components of a vector in three dimensions 4.8 Vector equations of a line and a plane <u>05Product of Vectors:</u> 5.1 Scalar or dot product of two vectors – Geometrical interpretation – Orthogonal Projections	<u>9.Differentiation</u> 9.1 Derivative of a function 9.2 Elementary Properties 9.3 Trigonometric, Inverse Trigonometric, Hyperbolic Inverse Hyperbolic Function Derivatives 9.4 Methods of Differentiation 9.5 Second Order Derivatives <u>10. Applications of Derivatives</u> 10.1 Errors and approximations 10.2 Geometrical Interpretation of a derivative 10.3 Equations of tangents and normals	8.5 Velocity and acceleration in simple harmonic motion 8.6 Force law for simple harmonic motion 8.7 Energy in simple harmonic motion 8.8 Some systems executing simple harmonic motion 8.9 Damped simple harmonic motion 8.10 Forced oscillations and resonance <u>Practical's:</u>5. Parallelogram law of forces (Concurrentforces) <u>CHAPTER-IX GRAVITATION</u> 9.1 Introduction 9.2 Kepler's laws 9.3 Universal law of gravitation 9.4 The gravitational constant 9.5 Acceleration due to gravity of the earth 9.6 Acceleration due to gravity below and above the surface of earth. 9.7 Gravitational potential energy 9.8 Escape speed 9.9 Earth satellite 9.10 Energy of an orbiting	8.8 Heavy water 8.9 Hydrogen as a fuel <u>9. S-BLOCK ELEMENTS: ALKALIAND ALKALINE EARTH METALS</u> <u>Group 1 Elements:</u> 9.1 Alkalimetals; electronic configurations; atomic and Ionic radii; ionization enthalpy; hydration enthalpy; physical properties; chemical properties; uses 9.2 General characteristics of the compounds of the alkalimetals : oxides; halides; salts of oxyacids 9.3 Anomalous properties of lithium: 9.4 Some important compounds of sodium: sodium carbonate; sodium chloride; sodium hydroxide; sodium hydrogen carbonate 9.5 Biological importance of sodium and potassium <u>Group2 elements</u> 9.6 Alkaline earth metals; electronic configuration; ionization enthalpy; hydration enthalpy; physical properties; chemical properties; uses. 9.7 General characteristics of compounds of the Alkaline earth metals
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	5.2 Properties of dot product 5.3 Expression of dot product in $\vec{i}, \vec{j}, \vec{k}$ system – angle between two vectors 5.4 Geometrical vector methods		satellite 9.11 Geo stationary and polar satellites 9.12 Weight lessness <u>CHAPTER-X</u> <u>MECHANICAL PROPERTIES OF SOLIDS</u> 10.1 Introduction 10.2 Elastic behavior of solids 10.3 Stress and strain 10.4 Hook's law 10.5 Stress – strain curve 10.6 Elastic moduli Applications of elastic behavior of materials Practical's: 6. Force constant of a spring. 7. Surface Tension.	9.8 Anomalous behavior of beryllium; its diagonal relationship with aluminum 9.9 Some important compounds of calcium 9.10 Biological importance of magnesium and Calcium <u>10. P-BLOCK ELEMENTS: GROUP-13 BORON FAMILY</u> 10.1 General introduction –electronic configuration, atomic radii, ionization enthalpy, electro negativity; physical and chemical properties 10.2 Important trends and anomalous properties of Boron 10.3 Important compounds of boron – borax, orthoboric acid, diborane 10.4 Uses of boron, aluminium and their compound <u>11. P-BLOCK ELEMENTS: GROUP – 14 CARBON FAMILY</u> 11.1 General introduction-electronic configuration, atomic and covalent radii, ionization enthalpy, electro
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				negativity; physical and chemical Properties
EAPCET classes on Addition of Vectors Assignment-VI UNITTEST-IV (From 23.11.2023 to 25.11.2023) DECEMBER				
ENGLISH	MATHS - A	MATHS-B	PHYSICS	CHEMISTRY
<u>Poetry and Prose</u> Revision <u>Extensive Reading</u> The Informer (One- Act Play) <u>Reading / Writing skills</u> Question form s & Question tags (6 hrs) Degrees of comparison of Adjectives (4 hrs) <u>Communication skills</u> Dialogue Writing (4 hrs) Odd sounds (1 hr)	5.5 Vector equations of a plane in normal form 5.6 Angle between two planes 5.7 Vector product (cross product) of two vectors and properties 5.8 Vector product in $\vec{i}, \vec{j}, \vec{k}$ system 5.9 Vector areas 5.10 Scalar triple product 5.11 Vector equation of a plane – different forms – skewlines – shortest distance – plane, condition for coplanarity 5.12 & 5.13 Vector triple product–results–	10.4 Lengths of tangent, normal, sub tangent and sub normal 10.5 Angles between two curves and condition for orthogonality of curves 10.6 Derivative as Rate of change 10.7 Rolle’s Theorem and Lagrange’s Mean value theorem without proofs and their geometrical interpretation 10.8 Increasing and decreasing functions	<u>CHAPTER-XI</u> <u>MECHANICAL PROPERTIES OF FLUIDS</u> 11.1 Introduction 11.2 Pressure 11.3 Stream line flow 11.4 Bernoulli’s principle 11.5 Viscosity 11.6 Reynolds number 11.7 Surface tension <u>CHAPTER-XII</u> <u>THERMAL PROPERTIES OF MATTER</u> 12.1 Introduction 12.2 Temperature and Heat 12.3 Measurement of temperature 12.4 Ideal – gas equation and absolute temperature 12.5 Thermal expansion	<u>Practicals:</u> VII. Qualitative Analysis 1. Reactionsof the following an ions with at least one confirmatory test for each anion. Carbonate(CO_3^{2-}) Sulphide (S^{2-}), Sulphite(SO_3^{2-}), Sulphate (SO_4^{2-}), Nitrite(NO_2^-), Nitrate(NO_3^-) Chloride(Cl^-) Bromide(Br^-), Iodide(I^-), Phosphate (PO_4^{3-}), Acetate(CH_3COO^-) 11.2 Important trends and anomalous properties of carbon

	solved problems	10.9 Maxima and Minima	12.6 Specific Heat capacity 12.7 Calorimetry 12.8 Charge of state 12.9 Heat transfer 12.10 Newton's law of cooling. Chapter – XIII THERMO DYNAMICS 13.1 Introduction 13.2 Thermal equilibrium 13.3 Zeroth law of thermo dynamics 13.4 Heat, internal energy and work 13.5 First law of thermo dynamics 13.6 Specific heat capacity 13.7 Thermo dynamic state variables and equation of state	11.3 Allotropes of carbon 11.4 Uses of carbon 11.5 Some important compounds of carbon and silicon- Carbon monoxide, carbon dioxide, silicon dioxide, Silicone's, silicates and zeolites <u>12. ENVIRONMENTAL CHEMISTRY</u> 12.1 Definition of terms: air, water and soil pollution's 12.2 Environmental pollution 12.3 Atmospheric pollution; 12.4 Acid Rain; particulate pollutants; smog 12.5 Stratospheric pollution 12.6 Water pollution Soil pollution: pesticides and industrial wastes Strategies to control environmental pollution Green chemistry: Green chemistry in day-to-day life <u>13.ORGANIC CHEMISTRY-SOME BASIC PRINCIPLES AND TECHNIQUES-HYDROCARBONS</u>
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				13.1 General introduction 13.2 Tetra valency of Carbon: shapes of organic compounds 13.3 Structural representations of organic compounds 13.4 Classification of organic compounds 13.5 Nomenclature of organic compounds 13.6 Isomerism 13.7 Fundamental concepts in organic reaction mechanisms 13.8 Methods of purification of organic compounds 13.9 Qualitative element analysis of organic Compounds 13.10 Quantitative elemental analysis of organic Compounds
HALF-YEARLY EXAMINATIONS 18.12.2023 to 23-12-2023				
JANUARY				
ENGLISH	MATHS - A	MATHS-B	PHYSICS	CHEMISTRY
<u>Poetry and Prose</u> Revision	EAPCET classes on PRODUCT of Vectors		Chapter – XIII THERMO DYNAMICS 13.8 Thermo dynamic processes	Practicals: VII.2. Reactions of the following cations with at least one confirmatory test for each cation Lead(Pb ²⁺),

<u>Extensive Reading</u> Revision <u>Reading / Writing skills</u> Correction of sentences (6 hrs) <u>Communication skills</u> Revision			13.9 Heat engines 13.10 Refrigerators and heat pumps 13.11 Second law of thermodynamics 13.12 Reversible and irreversible processes 13.13 Carnot engine, Carnot's theorem Chapter – XIV KINETIC THEORY 14.1 Introduction 14.2 Molecular nature of matter 14.3 Behavior of gases 14.4 Kinetic theory of an ideal gas 14.5 Laws of equipartition of energy 14.6 Specific heat capacity 14.7 Mean free path	Copper(Cu^{2+}), Aluminium(Al^{3+}), Ferric(Fe^{3+}), Manganese(Mn^{2+}), Nickel(Ni^{2+}), Zinc(Zn^{2+}), Cobalt(Co^{2+}), Calcium(Ca^{2+}), Strontium(Sr^{2+}), Barium(Ba^{2+}), Magnesium(Mg^{2+}) and Ammonium(NH_4^+) <u>HYDRO CARBONS</u> 13.11 Classification of hydrocarbons. 13.12 Alkanes- nomenclature, isomerism (structural and conformations of ethane only) Preparation and properties of alkanes 13.13 Alkenes- nomenclature, structure of ethene, isomerism (structural and geometrical). Methods of preparation of alkenes physical and chemical properties of alkenes 13.14 Alkynes- nomenclature and isomerism, structure of acetylene-methods of preparation of acetylene-
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				physical properties, chemical reactions of acetylene 13.15 Aromatic Hydrocarbons: nomenclature and isomerism-structure of benzene, resonance and aromaticity-Preparation of benzene-physical and chemical properties of benzene-directive influence of functional groups in mono substituted benzene, carcinogenicity and toxicity <u>PRACTICALS:</u> VIII. Detection of nitrogen, Sulphur and chlorine in an organic compound IX.PROJECT: Scientific investigations involving laboratory testing and collecting information from other sources
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ASSIGNMENT-VII

EAPCET Classes

SANKRANTHI HOLIDAYS: FROM 11.01.2024 TO 17.01.2024

PRE-FINAL EXAMINATIONS-I: FROM 19.01.2024 TO 25.01.2024

REOPENING AFTER SANKRANTI HOLIDAYS				
FEBRUARY				
ENGLISH	MATHS - A	MATHS-B	PHYSICS	CHEMISTRY
<u>Poetry and Prose</u> Revision <u>Extensive Reading</u> Revision <u>Reading / Writing skills</u> Revision <u>Communication skills</u> Revision	REVISION Practical Exams PRACTICAL EXAMINATION IPE 2024 TENATAIVELY 2nd Week of FEBRARUY 24 Theory Revision			
MARCH				
THEORY EXAMS-2024				