English PRE MID TERM

April:-

Reading: Practice of unseen passages:

prose & poetry both. Two passages will be given along with vocabulary, MCQ,

V.S.Q & S.Q.

Writing: Notices: Three notices related to

Institutions, competitions etc.

Letters to Editor: Two letters based on

different social problems.

Literature: Flamingo

Prose: 1. The Last Lesson

2. Lost Spring

Poetry: 1. My Mother at Sixty Six

Vistas:

Fiction: 1. The Tiger King

In Prose, explanation of the chapter with reading, short & long questions to be covered. In Poetry, explanation of the poem with reading comprehension & poetic devices to be covered.

(Some process to be followed in all the terms)

May:-

Writing:

- (i) Advertisements: for classified columns on the topics as Sale. Purchase, To Let, Situation Vacant/ Wanted etc.
- (ii) Posters: creating awareness regarding environment & society.
- (iii) Speech: Format & style, two speeches on different issues.

Literature: Flamingo

Prose: 1. The Interview

Poetry: 2. An Elementary school classroom in a slum.

<u>Vistas</u>

Fiction: 2. Should Wizard Hit Mommy?

ASL: ASL will remain in continuous process.

- Assessment will be based on interaction listening & speaking.
- Questions will be raised on given & taught text.

MID TERM

July:-

Reading:

- (i) Practice of unseen passages (800-900 words)
- (ii) Note making (400-500 words): Format, notes of the given passage & summary in 80-100 words) Writing:
- (i) Letters (all types): Formats & matter. Business or official letters.

(ii) Articles: Format & matter

Literature: Flamingo

Prose: 4. Deep Water

5. Rat-trap

Poetry: 3. Keeping Quiet

August:-

Writing:

(i) Applications (all types) Format, matter &ending

(ii) Report

Literature : <u>Flamingo</u> Prose : 6. Indigo

Poetry: 4 A Roadside Stand

Vistas

Fiction: 3. On the Face of It

4. Memories of Childhood

The Cutting of My Long HairWe Too are Human Beings

September:-

Literature: Flamingo

Prose: 7. Poets and Pancakes

Vistas

Fiction: 5. The Third Level

Note: Syllabus of Pre Mid Term including.

ASL: Same process will be followed as mentioned in Pre-Mid.

PRE BOARD EXAMS

October:-

Reading:

(i) Practice of Unseen passages (800-900 words)

Writing:

Debate (descriptive or argumentative) Format & matter.

Literature : Flamingo

Prose: 8. Going Places
Poetry: 5. A Thing of Beauty

<u>Vistas</u>

Fiction: 6. Evans Tries An O'Level

November:-

Reading: Practice of Note Making (Notes,

Abbreviations & summary)

Writing: Formal and informal invitations and replies:

format & matter will be given.

Literatrure: Flamingo

Poetry: 6. Aunt Jennifer's Tigers

Vistas

Fiction: 7. The Enemy

8. Journey to the end of the Earth

Note: Including the whole course.

ASL: Practical will be conducted as per schedule.

Hindi

निर्धारित पुस्तकें : आरोह – भाग–2

वितान — भाग—2 अभिव्यक्ति और माध्यम

PRE MID TERM

1. अपठित गद्यांश + काव्यांश आधारित प्रश्नोत्तर।

2. कार्यालयी हिंदी और रचनात्मक लेखन— अनुच्छेद—लेखन, कार्यालयी पत्र, पत्रकारीय लेखन, प्रिंट माध्यम, टी.वी., रेडियो इंटरनेट, हिंदी नेट संसार।

- 3. पाठ्य पुस्तक (पठित) काव्य खंड–हरिवंशराय बच्चन, आलोक धन्वा, कुँवरनारायण, रधुवीर सहाय। गद्य खंड– महादेवी वर्मा, जैनेन्द्र कुमार्। वितान– सिल्वर वैडिंग।
- 4. श्रवण—वाचन कौशल परीक्षण।
- 5. परियोजना कार्यार्थ विषय चयन।

अप्रैल:-

- 8 से 12 अप्रैल गद्य खंड—महादेवी वर्मा—परिचय 'भक्तिन' पाठारम्भ।
- 15 से 19 अप्रैल 'भिक्तन' पाठ + पाठाधारित प्रश्नोत्तर। जैनेन्द्र कुमार— बाजार दर्शन—पाठाध्ययन, प्रश्नोत्तर लेखन।
- 22 से 26 अप्रैल काव्यखंड—हरिवंशराय बच्चन—आत्म परिचय, दिन जल्दी—जल्दी ढलता है। आलोक धन्वा—पतंग। मई:--
- 1 से 3 मई कुँवर नारायण—कविता के बहाने, बात सीधी थी पर।
- 6 से 10 मई सिल्वर वैडिंग—मनोहर श्याम जोशी। श्रव्य गद्यांशधारित प्रश्नोत्तर (श्रवण—कौशल अभ्यास)
- 13 से 17 मई अभिव्यक्ति और माध्यम-पत्रकारीय लेखन-प्रिंट माध्यम टी.वी. रेडियो, इंटरनेट, हिंदी नेट संसार (लघूत्तरात्मक प्रश्न) कार्यालयी पत्र लेखन + अपठित गद्यांश एवं काव्यांश का पुनरभ्यास कार्य। परियोजना कार्यार्थ विषय चयन अनुच्छेद लेखन अभ्यास।

MID TERM

- 1.अपठित अनुच्छेदाधारित प्रश्नोत्तर + अपठित काव्यांशाधारित प्रश्नोत्तर।
- कार्यालयी हिंदी और रचनात्मक लेखन—अनुच्छेद लेखन, फीचर, आलेख, समाचार लेखन, विशेष रिपोर्ट, संपादकीय स्तंभ लेखन, साक्षात्कार, विशेष लेखन।
- 3. पाठ्य पुस्तक (पठित) काव्य खंड—शमशेर बहादुर सिंह, गजानन माधव मुक्तिबोध, गोस्वामी तुलसी दास, फिराक गोरखपुरी। गद्य खंड— धर्मवीर भारती, फणीश्वरनाथ रेणु, विष्णुखरे, रजिया सज्जाद ज़हीर। वितान—जूझ, अतीत में दबे पाँव।
- 4. श्रवण—वाचन कौशल परीक्षण।
- 5. परियोजना कार्यार्थ—विषय (चयनित) शोध + सुझाव। जुलाई:—
- 1 से 5 आरोह-काव्य खंड-शमशेर बहाद्र सिंह-उषा।
- 8 से 12 गजानन माधव मुक्ति बोध—सहर्षे स्वीकारा है। (परियोजना कार्य मूल्यांकन + समुचित सुझाव + मार्गदर्शन)
- 15 से 19 गोरवामी तुलसीदास—कवितावली, लक्ष्मण—मूर्छा और राम विलाप।
- 22 से 25 फिराक गोरखपुरी—रूबाइयाँ एवं काव्यांशाधारित श्रवण कौशल अभ्यास, गज़ल (श्रव्य काव्यांशाधारित श्रवण—कौशल अभ्यास)

अगस्तः-

- 1 से 9 धर्मवीर भारती–काले मेघा पानी दे। वाचन–कौशल अभ्यास
- 13 से 16 फणीश्वर नाथ रेणु—पहलवान की ढोलक।

- वाचन कौशल–1
- 19 से 22 विष्णु खरे— चार्ली चैप्लिन यानी हम। वाचन कौशल.....1
- 26 से 30 रजिया सज्जाद जहीर—नमक। वाचन कौशल.....। सितम्बरः—
- 2 से 6 वितान—आनंद यादव—जूझ। ओम थानवी—अतीत में दबे पाँव।
- 9 से 13 अभिव्यक्ति और माध्यम—समाचार लेखन, विशेष रिपोर्ट संपादकीय, स्तंभलेखन, साक्षात्कार (लघूत्तरात्मक प्रश्न)
- 16 से 20 विशेष लेखन—फीचर, आलेख। अपठित गद्यांश + काव्यांश आधारित प्रश्नोत्तर लेखन पुनरभ्यास। पठित पाठ्यक्रम की पुनरावृत्ति कार्य।

PRE BOARD EXAM

- 1. अपठित अनुच्छेदाधारित / गद्यांशाधारित प्रश्नोत्तर । अपठित काव्यांश—आधारित प्रश्नोत्तर ।
- 2. कार्यालयी हिंदी और रचनात्मक लेखन—नूतन और अप्रत्याशित प्रत्याशित विषयों पर रचनात्मक लेखन, कार्यालयी पत्र (विकल्प सहित) रेडियो नाटक, कहानी का नाट्य रूपांतरण।
- 3. पाठ्य पुस्तक—(पठित) काव्य खंड—उमाशंकर जोशी। गद्य खंड—हजारी प्रसाद द्विवेदी बाबा साहेब भीमराव आम्बेडकर। वितान— ऐन फ्रैंक—डायरी के पन्ने।
- 4. श्रवण एवं वाचन कौशल परीक्षण
- 5. परियोजना कार्य।

अक्टूबर:-

- 1 से 11 उमाशंकर जोशी–छोटा मेरा खेत, बगुलों के पंख।
- 14 से 24 हजारी प्रसाद द्विवेदी—शिरीष के फूल। वाचन कौशल परीक्षण—अभ्यास कार्य।

नवम्बर:-

- 1 से 8 बाबा साहेब भीमराव आंबेडकर—श्रम विभाजन और जाति प्रथा। कार्यालयी पत्र—लेखन अभ्यास कार्य।
- 11 से 15 ऐन फ्रैंक—डायरी के पन्ने। अनुच्छेद—लेखन एवं अपठित गद्यांश + काव्यांशाधारित प्रश्नोत्तर अभ्यास। वाचन कौशल परीक्षण—अभ्यास कार्य।
- 18 से 22 अभिव्यक्ति और माध्यम—रेडियो—नाटक, कहानी का रूपांतरण, पूर्व पठित पाठ्यक्रम का पुनरावलोकन
- 25 से 29 श्रवण कौशल अभ्यास कार्य, सम्पूर्ण पठित— पाठ्यक्रम का पुनरावलोकन। पूर्व परीक्षा— आगत प्रश्न पत्र का अभ्यास कार्य।

प्रति शनिवार- पठितांश से कक्षा-परीक्षा

- प्री बोर्ड परीक्षा—
- खंड–क 1. अपठित्–गद्यांश आधारित प्रश्न
 - 2. अपठित-काव्यांश आधारित प्रश्न
- खंड—ख कार्यालयी हिंदी और रचनातमक लेखन। अभिव्यक्ति और माध्यम
- खंड—ग पठित पाठ्य पुस्तकें आरोह—भाग—2, वितान—भाग—2
- श्रवण + वाचन कौशल—श्रव्य काव्यांश + गद्यांश + कथांश आधारित प्रश्नोत्तर आदि । वाचन—भाषण कविता पाठ आदि पर
- परियोजना—प्रदत्त विषय पर शोध एवं लेखन + प्रस्तुतिकरण परियोजना रूप में।

Maths PRE MID TERM

April:- (2nd & 3rd week of April)

Ch-1 Relation and Function

- Equivelence Relation (Along with one activity)
- One-One, Onto Function (Along with one activity)
- Coposition of Function
- Binary Operation and Properties

(3rd & 4th week of April)

Ch-2 Inverse Trigonometric Function

- Concept, Principal Value, Graph
- Proof of Properties
- Simplification of Function By Substitution
- Application of Properties (Along with one activity)

May:- (1st week of May)

Ch-3 Matrices

- Defination, Order, Types of Matrix
- Algebra and Their Properties
- Application of Algebra
- Symmetric, Skewsymm and Prop.
- Elementry Transformation

(2nd & 3rd week of May)

Ch-4 Determinants

- Defination, Expansion of Determinants
- Determinants by properties
- Minors, Co-factor, Adjoint and Prop.
- Application (Area, Colli, System of Linear Equations)

MID TERM

(1st week of July)

Ch-5 Continuity and Differentiability

- Concept of Conti. Diff. and working
- Types of Diff. (Chain Rule, Paramentric)
- Inverse, logarithimic, 2nd Derivatives
- Mixed Type of Derivatives
- Mean value Th. (Rolle's Lagrange)
 (Along with 2 Activity)

(2nd & 3rd week of July)

Ch-6 Application of Derivatives

 Rate of Change, Monotonicity, Tangent and Normal, Approximation, Maxima and Minima and Practical Problems. (Along with 1 Activity)

(4th week & 1st & 2nd week of August)

Ch-7 Integrals Calculas

- Def" Simple Problems
- Methods of Int. (Subs, Trigo.)
- Speciacial Integral with Reducible form
- By Partial Fraction
- By Parts with Reduceble Form
- Definite Int. (By Prop, Limit as Sum) (Along with 1 Activity)

(2nd week of August)

Ch-8 Application of Integral

 Area of Bounded Region, Concept, Working (Simple, 2 Curves)

(4th & 1st week of September)

Ch-12 Linear Programming Problems

- Concept And Parameter of L.P.G.
- Types (Manu Facturing, Diet, Transporation)

PRE BOARD EXAMS

(1st & 2nd week of October)

Ch-9 Differential Equations

- Differential ,Order, Degree
- Formation-Types of Solution
- Methods to solve Differential

(Variable Seprable, Homoge. Linear)

(2nd & 3rd week of October)

Ch-10 Vectors

- Differential, Concept, Types of Vectors
- Section Formula, Magnitude
- Product of Vectors (Dot, Cross, Scalar Tripple Product With Their Prop.)

(4th week of October and 1st & 2nd week of November)

Ch-11 3D Geometry

- Basic concept of 3-D
- Line Concept,Defferential Type, Angle, Shortest
 Distance, And Different Types of Equations
 of Lines, Image of a Point, Point of
 Intersection
- Plane Concept, Defferential, Angle, Different
 Types of Equation of Plane, Distance of A
 Point, Image
 (with 1 Activity)

Ch-13 Probability

- Recap of 11th Class Probability
- Conditional, Proof of Properties
- Multiplication Th. On Probability
- Baye's Total Law of Probability
- Random Variable, Bernoulis Trials.
 Binomial Distribution.
 (Along with 1 Activity)

(Along with I Ac

(Including whole syllabus)

Physics PRE MID TERM

April:-

Unit-1 Electrostatics

Ch-1. Electric Charges and Fields

Electric Charges: Conservation of charge, Coulomb's law-force between two point charges, forces between multiple charges, superposition principle and continuous charge distribution.

Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field.

Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight

wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).

Ch-2. Electrostatic Potential and Capacitance

Electric potential, potential difference, electric potential due to a point charge, a diple and system of charges; equipotential surface, electrical potential energy of a system of two point charges and of electric dipole in an electrostatic field.

Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarisation, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel platge capacitor with and without dielectric medium between the plates, energy stored in a capacitor.

May:-

Unit-II: Current Electricity

Ch-3. Current Electricity

Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, electrical resistance, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity. Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors; temperature dependence of resistance. Internal resistance of a cell, potential difference and

emf of a cell, combination of cells in series and in parallel. Kirchhoff's laws and simple applications. Wheatstone bridge, metre bridge.

Potentiometer-principle and its applications to measure potential difference and for comparing EMF of two cells; measurement of internal resistance of a cell.

MID TERM

July:

circular loop.

Unit-III Magnetic Effects of Current and Magnetism.

Ch-4. Moving Charges and Magnetism

Concept of magnetic foeld, Oersted's experiment. Biot-Savart law and its application to current carrying

Ampere's law and its applications to infinitely long straight wire. Straight and toroidal solenoids (only qualitative), force on a moving charge in uniform magnetic and electric field. Cyclotron.

Force on a current carrying conductor in a uniform magnetic field, force between to parallel current carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; moving coil galvanometer-its curent sensitivity and conversion to ammeter and voltmeter.

Ch-5. Magnetism and Matter

Current loop as a magnetic dipole and its magnetic

dipole moment, magnetic dipole momen tof a revolving electron, magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis, torque on a magnetic diple (bar magnet) in a uniform magnetic field; bar magnet as an equivalent solenoid, magnetic field lines; earth's magnetic field and magnetic elements.

Para-, dia- and ferro-magnetic substances, with examples. Electromagnets and factos affecting their strenghts, permanent magnets.

Unit-IV: Electromagnetic Induction and Alternating Currents.

Ch-6. Electromagnetic Induction

Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz'a Law, /Eddy currents. Self and mutual induction.

August:-

Ch-7. Alternating Current

Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LC oscillations (qualitative treatment only), LCR series circuit, resonance; power in AC circuits, wattless current. AC generator and transformer.

Unit-V. Electromagnetic waves:

Ch-8. Electromagnetic Waves

Basic idea of displacement current, Electromagnetic waves, their characteristics, their Transverse nature (qualitative ideas only).

Electromagnetic spectrum (radio waves, microwaves, infrared, visible,ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

September:

Unit-VI: Optics

Ch-9. Ray Optics and Optical Instruments

Ray Optics: Reflectionof light, spherical mirrors, mirror formula, refraction of light, total internal reflection and its applications, optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism.

Scattering of light-blue colour of sky and reddish appearance of the sun at sunrise and sunset.

Optical instruments: Microscopes and astronomiecal telescopes (reflecting and refracting) and their magnifying powers.

(Including Pre Mid Term syllabus)

PRE BOAD EXAMS

CH-10. Wave Optics

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wavefronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double-slit experiment and expression for fringe width, coherent sources and sustained interference of light, diffraction due to a single-slit, width of central maximum, resolving

power of microscope and astronomical telescope, polarisation, plane polarised light, Brewster's law, uses of plane polarised light and Polaroids.

November:-

Unit VII: Dual Nature of Radiation and Matter

Ch-11. Dual Nature of radiation & Matter

Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light.

Matter waves-wave nature of particles, de-Broglie relation, Davisson-Germer experiment (experimental details should be omitted; only conclusin should be explained)

Unit-VIII: Atoms and Nuclei

Ch-12. Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum.

Ch-13. Nuclei

Composition and size of nucleus, Radioactivity, alpha, beta and gamma particles/rays and their properties; radioactive decay law.

Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Unit-IX: Electronic Devices

Ch-14. Semi conductor electronics- Materials, Devices & Simple Circuits

Energy bands in conductors semiconductors and insulators (qualitative indeas only)

Semiconductor diode-I-V characteristics in forward and reverse bias, diode as a rectifier;

Special purpose p-n junction diodes: LED, photodiode, solar cell, and Zener diode and their characteristics, Zener diode as a voltage regulator. (Including Pre Mid Term & Mid Term Syllabus)

Chemistry PRE MID TERM

April:-

Ch-1. Solutions

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, colligative properties-relative lowering of vapour pressure, Raoult's law, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass. Van't Hoff factor.

Ch-2. Haloalkanes & Haloarenes

Haloalkanes: Nomenclature, nature of C-X bond, physical and chemical properties, mechanism of substitution reactions, optical rotation.

Haloarenes: Nature of C-X bond, substitution reactions (Directive influence of halogen in

monosubstituted compounds only).

Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

May:-

Ch-3. Alcohols, Phenols & Ethers

Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol.

Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols.

Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses.

MID TERM

July:-

Ch-1. Aldehydes, Ketones & Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes: uses.

Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties, uses. Ch-2. Organic Compounds containing Nitrogen

Amines: Nomenclature, classification, structure, methods of preparation, physical and chemcial properties, uses, Identification of primary, secondary and tertiary amines.

Cyanides and isocyanides-will be mentioned at relevant places in text.

Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

August:-

Ch-3. Electrochemistry

Redox reactions, conductance in electrelytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell electrolytic cells and Galvanic cells, lead accumulator, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, fuel cells, corrosion. Ch-4. Chemical Kinetics

Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half life (only for zero and first order reactions), concept of collision theory (elementary idea, no

mathematical treatment). Activation energy, Arrhenious equation

August:-

Ch-5. Polymers

Classification-natural and synthetic, methods of polymerization (addition and condensation), copolymerization, some important polymers: natural and synthetic like polythene, nylon polyesters, bakelite, rubber, Biodegradable and non-biodegradable polymers.

Ch-6. Chemistry in Everyday life

Chemicals in medicines: analgesics, tranquilzers antiseptics, disinfectants, antimicrobials, antifertility drugs, antibiotics, antacids, anthistamines.

Chemicals in food- preservatives, artifical sweetening agents, elementary idea of antioxidants.

Cleansing agents: soaps and detergents, cleansing action

(Including Pre Mid Term)

PRE BOAD EXAMS

October:-

Ch-1. Surface Chemistry

Adsorption-physisorption and chemisorption, factors affecting adsoprtion of gases on solids, catalysis, homogeneous and heterogeneous activity and selectivity; enzyme catalysis colloidal state distinction between true solutions, colloids and suspension, lyophilic, lyophobic multi-molecular and macromolecular colloids, properties of colloids; Tyndall effect, Brownian movement electrophoresis, coagulation, emulsion-types of emulsions.

Ch-2. General Principles and processes of isolation of elements

Principles and methods of extraction-concentration, oxidation, reduction-electrolytic method and refining; occurrence and principles of extraction of aluminium, copper, zinc and iron.

November:-

Ch-3. p-block Elements

Group-16 Elements: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties, dioxygen; Preparation, Properties and uses; classification of Oxides, Ozone, Sulphur-allotropic forms; compounds of Sulphur: Preparatin and Properties and uses of Sulphur-dioxide, Sulphuric acid: industrial process of manufacture, properties and uses; Oxoacids of Sulphur (Structures only).

Group-17 Elements: Geneal introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; compounds of halogens, Preparation, properties and usesof Chlorine

and Hydrochloric acid, interhalogen compounds, Oxoacids of halogens (structures only).

Group-18 Elements-Geneal introduction, electronic configuration, occrrence, trends inphysical and chemical properties, uses.

Ch-4. d-block Elements

General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transitition metals-metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of $\rm K_2Cr_2O_7$ and $\rm KMnO_4$.

Lanthanoids-Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences.

Actinoids-Electronic configuration, oxidation states and comparison with lanthanoids.

Ch-5. Co-ordination Compounds

Coordination compounds-Introduction ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding Werner's theory, VBT and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative inclusion, extraction of metals and biological system) Ch-6. Biomolecules

Carbohydrates: Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); importance of carbohydrates.

Proteins: Elementary idea of-amino acids, peptide bond, polypeptides, proteins, structure of proteins-primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones-Elementary idea excluding structure.

Vitamins: Classification and functions.

Nucleic Acids: DNA and RNA (Including Pre Mid Term & Mid term)

Biology PRE MID TERM

March:-

Ch-1. Reproduction in Organisms

Reproduction, a characteristic feature of all organisms for continuation of species; modes of reproduction-asexual and sexual reproduction; asexual reproduction-binary fission, sporulation, budding, gemmule formation, fragmentation; vegetative propagation in plants.

April:-

Ch-2. Sexual Reproduction in Flowering Plants

Flower structure; development of male and female gametophytes; pollination-types, agencies and examples; outbreeding devices; pollen-pistil interaction; double fertilization; post fertilization events-development of endosperm and embryo, development of seed and formation of fruit; special modes-apomixis, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation.

Ch-3. Human Reproduction

Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis-spermatogenesis and oogenesis; menstrual cycle; fertilisation, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (elementary idea); parturition (elementary idea); lactation (elementary idea).

May:-

Ch-4. Reproductive Health

Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); birth control, need and methods, contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies-IVF, ZIFT, GIFT (elementary idea for general awareness).

MID TERM

May:

Ch-5. Principles of Inheritance and Variation Heredity and variation: Mendelian inheritance; deviations from Mendelism-incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance; chromosome theory of inheritance; chromosomes and genes; Sex determination-inhumans, birds and honey bee; linkage and crossing over; sex linked inheritance-haemophilia, colour blindness; Mendelian disorders in humans; thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.

July:-

Ch-6. Molecular basis of inheritance

Search for genetic material and DNA as genetic material; Structure of DNA and RNA, DNA packaging, DNA replication; Central dogma; transcription, genetic code, translation;gene expression and regulation-lac operon; genome and human and rice genome projects: DNA fingerprinting.

Ch-7. Evolution

Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution-variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy-Weinberg's principle; adaptive radiation; human evolution.

August:-

Ch-13. Organisms and Populations

Organisms and evironment: Habitat and niche, population and ecological adaptations; population interactions-mutualism, competition, predation, parasitism, population atributes growth, birth rate and death rate, age distribution.

Ch-14. Eco System

Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy; nutrient cycles (carbon and phosphorous); ecological succession; ecological services-carbon fixation, pollination, seed dispersal, oxygen release (in brief).

Ch-15. Biodiversity and Conservation

Concept of biodiversity; patterns of biodiversity; importance of biodiversity; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, exitinction, Red Data Book, biosphere reserves, national parks, sanctuaries and Ramsar sites.

September:-

16. Environmental Issues

Air pollution and its control; water pollution and its control; agrochemicals and their effects; solid waste management; radioactive waste management; greenhouse effect and climate change; ozone layer depletion; deforestation; any one case study as success story addressing environmental issue(s). (Including Pre Mid Term syllabus)

PRE BOARD EXAMS

October:-

Ch-8. Human Health and diseases

Pathogens; parasites causing human diseases (malaria, dengue, chickengunia, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology-vaccines; cancer, HIV and AIDS; Adolescence-drug and alcohol abuse.

CH-9. Strategies for enhancement in food production Improvement in food production: Plant breeding, tissue culture, single cell protein, Biofortification, Apiculature and Animal husbandry.

November:-

Ch-10. Microbes in Human Welfare

In husehold food processing, industrial production, sewage treatment, energy generation and microbes as biocontrol agents and biofertilizers. Antibiotics; production and judicious use.

Ch-11. Biotechnolgy: Principles and Processes Genetic Engineering (Recombinant DNA Technology) 12. Biotechnolgy and its Application

Application of biotechnology in health and agriculture: human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms Bt crops; transgenic animals; biosafety issues, bio piracy and patents.

(Including syllabus of Pre Mid Term and Mid Term)

Accountancy PRE MID TERM

April:-

Ch-1 Not for Profit Organisation:

Terms, Income and Expenditure A/c. Balance sheet at the time of Beginning and Closing, Subscription A/c. Credition & Fund Based Accounting.

Ch-2 Fundamentals P/L App. Past Adjustment & Guarantee & Valuation of Goodwill.

Average Profit Methods, Super Profit Method Capitalisation Method.

May:-

Ch-3 Change in Profit Sharing Ratio:

Goodwill, G.R. Revaluation, Partner's cal & Balance Sheet.

Ch-4 Admission of a Partner:

New ratio, sacrificing Ratio, Treatment of Goodwill. Revaluation A/c, Partner's Capital A/c, Balance Sheet with Journal Entries.

Project Work: For Summer Vacation:

One project out of project from CBSE syllabus.

Prepare Journal, Ledger, Trial Balance Trading, P/L and Balance Sheet.

MID TERM

July:-

Ch-5 Retirement & Death of a Partner

New ratio, Gaining ratio, Goodwill, Revaluation A/c Partner's Capital A/c & Balance Sheet with Journal Entries.

Death:- Journal Entries, Partner's Capital A/c Executors A/c Balance Sheet.

Ch-6 Dissolution of Partnership

Journal Entries, Realisation A/c Partner's Capital A/c, Cash on Bank A/c

August:-

Ch-7 Issue of Shares:

Journal Entries with cash book.

(Including Pre Mid Term Syllabus)

September:-

Ch-8 Issue of Debentures.

Project Work:

Checking of Project Work.

PRE BOARD EXAMS

October:-

Ch-9 Redemption of Debentures

Lump Sum draw of Lot, creation of D.R.R.

Ch-10 Theory of Financial Statement Analysis

Ch-11 Presentation of Balance Sheet

Ch-12 Comparative & Common Size Statement of Statement of P/L.

Ch-13 Ratio Analysis: All Ratios

November:-

Ch-14 Cash Flow Statement

Operating Activity, Investing Activity, Financing Activity. (Including whole course)

Project upon Ratio & Cash Flow.

Business Studies PRE MID TERM

April:-

1. Nature and Significance of Management

Concept, features, objectives, importance, nature, levels, functions & co-oodination.

2. Principles of Management

Meaning, Nature, Significance, Fayol's Principles of Mgt, Scientific Mgt by F.W. Taylor, Comparlson between Taylor & Fayol

May:-

3. Business Environment

Meaning, Nature, Importance, Dimensions, New Economic Policy 1991 and its Impact on Business.

4. Planning

Meaning, Features, Importance, Limitations Planning Process, Single use and Standing Plans, Types of Plans. Project Work: (For Summer Vacation)

Student has to select one topic out of four and prepare project over it.

- 1. Elements of Business Environment
- 2. Principles of Mgt.
- 3. Stock Exchange
- 4. Marketing

MID TERM

July:-

5. Organising

Meaning, Process, Importance, Org. Structure, Delegation of authority Centralisation and Decertralisation.

6. Staffing

Meaning, Importance, Staffing and Human Resource Mgt. Staffing Process, Components of Staffing, Methods of Training)

August:-

7. Directing

Meaning Characteristics, Importance, Elements, Supervision, Motivation, Leadership, Communication

Controlling

Meaning, Nature, Importance, Relationship between Planning & Controlling, Controlling Process

September:-

9. Financial Management

Meaning objectives, Financial Decesions, Financial Planning, Capital Structure, Fixed & Working Capital, Working Capital (Short term investment decision) (Including Pre Mid Term syllabus)

Project Work:

Checking of Project Selected by Student.

PRE BOARD EXAMS

October:-

10. Financial Market

Concept, Nature Money Market, Capital Market, Stock Exchange SEBI

11. Marketing Management

Concept features, functions, Marketing Mgt. Philosophies, Marketing Mix, Branding Labelling & Package, Price, Physical Distribution & Promotion)

November:-

12. Consumer Protection

Concept, Importane, Scope, Consumer, Rights & Responsibilities, Redressal Agencies Under Consumer Protection Act 1986 and their jurisdication) (whole course)

Economics PRE MID TERM

Indian Economics Development

April:-

Ch-7 Poverty

- Relative & Absolute poverty.
- Poverty line
- Causes of Poverty
- Poverty Alleviation Programmes.

May:-

Ch-9 Rural Development

- Chalenge of Rural Development
- Sources of Rual Credit
- Agricultural Marketing
- Organic farming and sustainable development Macro Economics

Ch-1 Introduction to Macro Economics Unit 5 (Some basic concepts)

- Types of Goods.
- Stock and flow
- Gross Investment and development.

March:-

Ch-3 Money and Banking (Unit-6)

- Meaning and Replay of Money
- Money creation by Commercial Banks
- Central Bank, its functions- Qualitative and Quantitative measure to control credit.

April:-

Ch-7 Govt Budget and the Economy. (Unit-8)

- Meaning, Objectives and Components
- Classification of receipts and expenditures.
- Type of deficits, their implications and measures to control.

May:-

Project Work: (Project file to be prepared on any of the topics prescribed by CBSE)

MID TERM

Indian Economic Development

July:-

Ch-1 Indian Economy on the era of Independence

- Features of Indian Economy on the eve of Independence
- State of Agriculture, Industry and foreign trade.
- Demographic & Occupational structure of India
- Positive effect of British rule in India

Ch-2 Five Year Plans: Goals & Achievements

- Economic/Directive/Comprehensive Planning
- Types of Economics.
- Long term/Short term plans
- Achievement & failures of planning.

Ch-3 Features, problem and policies of Agriculture.

- Inmportance, features and problems of Indian Agriculture
- Agrarian Reforms
- Green Revolution

August:-

Ch-4 Strategy of Industrial Growth (1947-1990)

- Industrial Policy Resolution 1956
- Small Scale Industries
- Satient feature of the stragegy of Industrial Growth during 1950-90.

Ch-5 Indian foreign Trade.

- International trade at the time of Independence and after independence.
- Good and bad impacts of inward looking trade strategy.

Ch-6 Economic Reforms since 1991 or New Economic Policy

- Economic reforms, their needs.
- Liberalisation-fiscal and financial reforms.
- Privatisation
- Globlisation, Demonetization & GST.
- Positive and Negative aspects of LPG.

Ch-8 Human Capital formation in India.

- Role, Problems, importance objectives of human capital formation.
- Growth of education sector and problems related to it.

Macro Economics

September:-

Unit-9 Balance of Payment.

Ch-8 Foreign exchange

- meaning of fixed, flexible and managed floating exchange rate.
- Determination of exchange rate in free market.

Ch-9 Balance of Payment

Meaning, Components and meaning of BOP deficit. (Including the course of Pre Mid Term)

PRE BOARD EXAMS.

November:-

Ch-10 Employment and Unemployment

- Worker: Self employed & hired/casual and Regular
- Casualisation and Informatisation of Employment.
- Types of Rural & Urban Unemployment
- Causes of Unemployment
- Measures to solve the problem.

Ch-11 Infrastructure

- Infrastructure: Economic & Social
- Energy: forms and sources
- Electricity as an emerging challenge
- Health: Development and as an emerging challenge.

Ch-12 Environment and Sustainable Development

- Significance and Functions
- Environment Pollution: Causes
- Global warming, Measures to Save Environment

Sustainable Development

Ch-13 Development experience of India, Pak and China.

- Economics of India, PoK and China
- Economic reforms
- Comparision of India, PoK, China-GDP Growth, Structure of Growth, Demographic indication etc.

Macro Economics
October:- Unit-5

Ch-2 National Income and Related Aggragates

- Circular flow of income (2 sector model)
- Methods of calculating National Income-Value added, income and expenditure method
- GNP, NNP, GDP, NDP at market price and factor cost
- Real and Nominanl GDP

Unit-7 Determination of Income and employment. Ch-4 Aggregate demand and its components (AFC, APC, MPC, MPS, Muliplier)

Ch-5 National Income determination and Multiplier

 Problem of Excess and deficient demand and measures to correct them.

(Including whole course)

Engineering Graphics PRE MID TERM

April:-

<u>Isometric Projection of Solids</u>, Isometric Scale, Isometric Projection of Solids-Cubes, triangle, square, pentagonal & hexagonal prisms & pyramids and their trustums, cone, cylinder, sphere & hemisphere. Combination of two solids.

Practical:

Third Missing view and isometric view of machine Blocks. Students will prepare practical file of fifteen prescribed machine blocks during summer break.

MID TERM

July:-

<u>Assembly/Disassembly Drawings:</u> Bearings-Open Bearing, Bush Bearing. Rod Joints: Sleeve & Cotter joint, Socket & Spigot Joint, Gib & Cotter joint.

August:-

Machine Parts:-Threads-Standard profile of BSW, Metric External, Metric Internal, Square and Knuckle thread.

September:-

<u>Freehand Sketching</u> of Studs (Plain, Square & Collar Stud)

PRE BOARD EXAMS.

October:-

<u>Assembly/Disassembly Drawings:</u> Tie Rod Joint: Turn

Pipe Joint: Flanged Pipe joint

Novermber:-

Couplings: Protected & Uncomprotected Flange Coupling

Pulleys: Solid web C I Pulley. **October:-** Machine Parts:

Bolts-Square, Hexagonal, Hook & Tee Bolt & Nuts Plains Washer, Combination of Nuts & Bolts

Single Rivetted Lap Joint.

November:-

<u>Free hand Sketches</u> of Screws (round, Cheese, Socket, 90° flat counter sunk head & grub screw)

<u>Free hand Sketches</u> of Rivets (Snap, pan head without tapered neck, flat head & 60° countersunk head)
Freehand sketches of keys (rectangular sunk taper key

woodruff & gib head feather key)

HUMANITIES (Political Science) PRE MID TERM

April:-

Politics in India Since Independence:

- Ch-1. Challenges of Nation Building
 - Nehru's approach to nationl uilding.
 - Legacy of partition
 - Political conflict over language
- Ch-2. Era of One-party Dominance
 - First three geneal elections
 - Nature of congress dominance
 - major opposition parties
- Ch-3. Politics of Planned Development
 - Five year plans
 - Expansion of state sector
 - Green Revolution and its Political follouts.

May:-

1. Contemporary World Politics:

Ch-1. The Cold War Era

- Emergence of two power blocs
- Arenas of the cold war
- Challenges to Bi-polarity
- Non Aligned Movement

Ch-2 The End of Bipolarity

- New Entities in World Politics
- Introduction of democriatic politics and capitalism
- India's relation with Russia

Project: A field survey will be conducted by the students on 'Recent Developments In Indian Politics

Note: Reading, explanation, discussion, long & short Q.Ans. Cartoon based questions, map work (Common to all chapters)

MID TERM

July:-

Politics in India Since Independence:

Ch-4. India's External Relations

- Nehru's foreign policy.
- Sino-Indian war of 1962

- Indo-Pak war of 1965 and 1971
- Ch-5. Challenges to the Congress System
 - Political succession after Nehru.
 - Non Congressism
 - Politics of 'Garibi Hatao'
- Ch-6 The Crisis of Democratic Order
 - Search for committed bureaucracy
 - Emergency context
 - 1977 elections and formation of Janta Party
- Ch-7 Popular Movements In India
 - Farmer's Movement, Women's Movement
 - Implementation of Mandal Commission Report

August:-

Contemporary World Politics:

- Ch-3. US Hegemony in World Politics
 - Growth of unilateralism
 - First Gulf war
 - India's renegotiation with USA
- Ch-4 Alternative Centres of Power
 - Rise of China as an economic power.
 - India's changing relations with China
- Ch-5 Contemporary South Asia
 - Democratisation in Pakistan & Nepal
 - Ethnic Conflict in Srilanka
 - India's relations withits neighbour
- Ch-6 International Organisations
 - Restructuring of the UN
 - India's Position in UN

September:-

Revision to be done.

Note: Pre Mid Term course will be included.

PRE BOARD EXAMS

Politics in India Since Independence:

- Ch-8. Regional Aspirations
 - Rise of regional parties.
 - Punjab crisis and the anti-sikh riots of 1984
 - The Kashmir situation
- Ch-9 Recent Developments in Indian Politics
 - Participatory Upsurge in 1990s
 - Rise of the JD and the BJP
 - Coalition Governments

NDA-(1998-2004) UPA (2004-2014)

NDS-(2014 onwards)

Contemporary World Politics:

- Ch-7 Security in the Contemporary World
 - Traditional concerns of security.
 - Politics of disarmament
 - Global poverty. Human Security

November:-

- Ch-8 Environment and Natural Resources
 - Environment Movement
 - Rights of indigenous people.
 - India's stand in global environmental debater.

Ch-9 Globalisation

- Economic, cultural and Political manifestations.
- Anti-globalization movements
- India as an arena of globalization

Note: Pre Mid & Mid Term course will be included.

Viva:- To be conducted by external examiner.

HUMANITIES (History) PRE MID TERM

April:-

Theme in Indian History-Part-1 (Unit 1 to 4)

Unit-1 The story of the First Cities:

- Harappan Archaeology
- Earty urban centres (Broad overview)
- Story of discovery: Harappan Civilization.
- Discussion:-How it has been utilized by historians/ archaeologists.
- Archaeological Report.

Unit-2 Political and Economic History:-

How inscriptions tell a story.

Broad over view. Political and economic history from the Mauryan to the Gupta Period.

Story of Discoverly: Inscriptions and the decipherment of the script.

Excerpt: Ashokan in scription and Gupta period land grant.

Discussion: Interpretation of inscriptions by historians.

May:

Unit-3 Social Histories: Using the Mahabharata:

Broad overview: Issues in Social history, including caste, class, Kinship and gender story of discovery-Transmission and publications of the Mahabharata.

Excerpt: From the Mahabharata

Discussion: Other Sources for reconstructing social history.

Unit-4 A history of Buddhism: - Sanchi Stupta

Broad Overview: Religious histories of Vedic religion, Jainism, Vaishnavism, Shaivism.

Focus-On Buddhism.

Excerpt/Discussion-Ways in which sculptures has been interpreted by historians/other sources.

Map Work: on themes 1 to 4

Project Work:- To be given before Summer Vacation

MID TERM

July:-

Themes in Indian History Part-II. (Unit 5 to 9)

Unit-5 Medieval Society through Travellers Accounts:

Broad Overview: Outline of social and cultural life. Story of their writings—A discussion over their travelling and writing.

Excerpts:-From Albiruni, bn Battuta, Bernier, Discussion over their accounts.

Unit-6 Religious histories:

The Bhakti-Sufi Tradition.

- Braad overview: Religious developments/ Ideas and practicas of the Bhakti Sufi Saints.
- Story of Transmission-How Bhakti Sufi Composition Preserved
- Excerpt-from Bhaki Sufi work
- Discussion over it.

August:

Unit-7 New Architecture: HAMPI:

- Buildings during Vijayanagar period temples, forts, irrigation facilities.
- Relationship between architecuture and the political system.
- Story of Discovery-How Hampi was found Excexpt and Discussion.

Unit-8 Agrarian Relations: The Ain-i-Akbari: Broad overview-Agrarian relations in the 16th and 17th centuries and patterns of change Story of Discovery-Account of Ain-i-Akbari Excerpt/Discussion.

September:-

Unit-9 The Mughal Court: Reconstructing Histories Through Chronicles.

Broad overview-Political history 15th-17th contury
 Discussion of the Mughal court.

Story of discovery/Excerpts/Discussion-how historians used the texts to reconstruct political histories.

Map Work on unit 5 to 9. (Including Pre Mid Term)

PRE BOARD EXAMS.

Theme in Indian History Part-III (Unit 10 – 15)

October:-

Unit-10 Colonialism and Rural Society:

Evidence from official Reports.

Broad overview-Life of Zamindars, peasants and artisan in the late 18th century.

East India Company, revenue settlements

Change over the 19th Century

Story of official Records/Excerpts-From Fifth Record and Accounts.

Excerpts/Discussion over the afficial records.

Unit-11 Representations of 1857

Broad overview-The events of 1857-58/vision of unity Focus-Lucknow/Excerpts/Discussion-How the pictures of 1857 shaped British opinion.

November:-

Unit-12 Colonialism and Indian Towns:

Town plans and Municipal Reports, Broad Overview-History of towns, cities, hill stations in India, Madras/Calcutta/Bombay Excerpts/Discussion-How the different sources can be used to reconstruct the history of towns. Unit-13 Mahatma Gandhi through contemporary eyes. Broad Overview-The Nationalist Movement 1918-48

 The nature of Gandhi an Politics and leadership Excerpts/Discussion-Newspaper as a source

Unit-14 Partition through Oral Sources.

Broad Overview-The history of 1940s/Nationalism, communalism and Partition.

Focus-Punjab/Bengal

Excerpts/Discussion.

Units15 The Making of the Constitution:

Broad overview:-Independence and the New Nation State,

The making of the constitution.

Focus: The constitutional Assembly debates.

Exceerpts/Discussion over debates.

Map Work on Unit 10 to 15

Including Pre Mid Term & Mid Term whole course

HUMANITIES (Psychology) PRE MID TERM

April:-

Ch-1 Variations in Psychological Attributes

The topics in this unit are:

- 1. Introduction
- 2. Individual Differences in HUman Functioning
- 3. Assessment of Psychological Attributes
- 4. Intelligence
- 5. Theories of Intelligence
 - (a) Theory of Multiple Intelligence
 - (b) Triarchic Theory of Intelligence
 - (c) Planning, Attention-arousal, and simultaneoussuccessive Model of Intelligences
- 6. Individual Differences in Intelligence
 - (a) Variations of Intelligence
- 7. Culture and Intelligence
- 8. Emotional Intelligence
- 9. Special Abilities
 - (a) Aptitude: Nature and Measurement
- 10. Creativity

May:-

Ch-2 Self and Personality

The topics in this unit are:

- 1. Introduction
- Self and Personality
- 3. Concept of Self
- 4. Cognitive and Behavioural Aspects of Self
 - (a) Self-esteem, Self-Efficacy and

Self-regulation

- 5. Culture and Self
- 6. Concept of Personality
- 7. Major Approaches to the Study of Personality
 - (a) Type Approaches
 - (b) Trait Approaches
 - (c) Psychodynamic Approach
 - (d) Behavioural Approach
 - (e) Cultural Approach
 - (f) Humanistic Approach
- 8. Assessment of Personality
 - (a) Self-report Meaures
 - (b) Projective Techniques
 - (c) Behavioural Analysis

Ch-3 Meeting life Challenges

The topics in the unit are:

- 1. Introduction
- 2. Nature, Types and Sources of stress
- 3. Effects of stress on Psychological Functioning and Health
 - (a) Stress and Health
 - (b) General Adaptation Syndrome
 - (c) Stress and Lmmune System

Project/Practicals:

- Case study to be prepared
- Raven's standard progressive matrices (RSPM)

MID TERM

July:-

Remaining Part of Ch-3

- (d) Lifestyle
- 4. Coping with Stress
 - (a) Stress Management Techniques
- 5. Promoting Positive Health and Well-being
 - (a) Life skills

Ch-4 Psychological disorders

The topics in this unit are:

- 1. Introduction
- Concepts of abnormality and psychological Disorders
- 3. Classification of Psychological Disorders
- 4. Factors Underlying Abnormal Behaviour
- 5. Major Psychological Disorders
 - (a) Anxiety Disorders
 - (b) Somatoform Disorders
 - (c) DissociativeDisorders
 - (d) Mood Disorders
 - (e) Schizophrenic Disorders
 - (f) Behavioural and Developmental Disorders
 - (g) Substance-use Disorders

Ch-5 Therapeutic Approaches

The topics in this unit are:

- 1. Nature and process of psychotherapy
- Types of therapies
 - (a) Psychodynamic Therapy
 - (b) Behaviour Therapy
 - (c) Cognitive Therapy
 - (d) Humanistic existential Therapy
 - (e) Biomedical Therapy
 - (f) Alternative Therapies
- 3. Rahabilitation of the Mentaily III

August:-

Ch-6 Attitude and social cognition.

The topics in this unit are:

- 1. Introduction
- 2. Explaining Social Behaviour
- 3. Nature and Components of Attitudes
- 4. Attitude Formation and Change
 - (a) Attitude Formation
 - (b) Attitude Change
 - (c) Attitude-Behaviour Relationship
- 5. Prejudice and Discrimination
- 6. Strategies for Handling Prejudice
- 7. Social Cognition
- 8. Schemas and Stereotypes
- 9. Impression Formation and Explaining
- 10. Behaviour of Others through Attributions
 - (a) Impression Formation
 - (b) Attribution of Causality
- 11. Behaviour in the Presence of Others
- 12. Pro-social Behaviour
 - (a) Factors Affecting Pro-social Behaviour

September:-

Ch-7 Social Influence and group processes (½ chapter)

The topics in this unit are:

- 1. Introduction
- 2. Nature and Formation of Groups
- 3. Type of Groups
- 4. Influence of Group on Individual Behaviour
 - (a) Social Loafing
 - (b) Group Polarisation

Practicals:-

- Maudsley's Personality Inventory
- David's Battery of Differential Abilities (DBDA) (Including Ch-1, 2 & 3)

PRE BOARD EXAMS

October:-

Remaining part of Ch-7

- 5. Conformity, Compliance, and Obedience
- 6. Cooperation and Competition
 - (a) Determinants of Cooperation and

Competition

- 7. Social Identity
- 8. Intergroup Conflict: Nature and Causes
- 9. Conflict Resolution Strategies

Ch-8 Psychology and life.

The topics in this unit are:

- 1. Introduction
- 2. Human-Evironment Relationship
 - (a) DifferentViews of the Human-Environment Relationship
- 3. Environmental Effects on Human Behaviour
 - (a) Human Influence on the Envoronment
 - (b) Noise
 - (c) Pollution
 - (d) Crowding
 - (e) Natural Disasters
- 4. Promoting Pro-envioronmental Behaviour
- 5. Psychology and Social Concerns
 - (a) Poverty and Discrimination
 - (b) Aggression, Violence And Peace
 - (c) Mahatma Gandhi on Non-violence
 - (d) Health
 - (e) Impact of Television on Behaviour

November:-

Ch-9 Developing psychological skills The topics in this unit are:

- 1. Introduction
- 2. Developing as an effective Psychologist
- 3. General Skills
- 4. Observational Skills
- 5. Specific Skills
 - (a) Communication Skills
 - (b) Psychological Testing Skills
- Interviewing Skills
- 7. Counselling Skills

Practicals:

- 1. Sinha's Comprehension Anxiety Test (SCAT)
- 2. Adjustment Inventory for School Students (AISS) Note: Including whole course

HUMANITIES (Home Science) PRE MID TERM

March:-

Unit-II. Nutrition, Food Science and Technology

Ch-2 Clinical nutrition and dietetics

Ch-3 Public nutrition and health

April:-

Ch-4 Catering and food services management

Ch-5 Food processing and technology

Ch-6 Food quality and food safety

Unit-IV Fabric and Apparel

Ch-11 Design for fabric and apparel

May:-

Ch-12 Fashion Design and merchandising

Ch-13 Production and quality control in garment industry

Ch-14 Textile conservation in Museums

Ch-15 Care and maintenance of fabrics in Instutions

MID TERM

July:-

Unit-III. Human Development and Family Studies

Ch-7 Early childhood care and education

Ch-8 Guidance and counseling

Ch-9 Special education and support services

Ch-10 Management of Support services institutions and programs for children, youth and elderly

August:-

Unit-V Resource Management

Ch-16 Human Resource Management

Ch-17 Hospitality management

Ch-18 Designing of interior and exterior space

Ch-19 Event management

Ch-20 Consumer service

September:-

Unit-I Ch-1: Work, livelihood and career; Preparation, choices and selection Quality of life-Social responsibility and voluntarism-Traditional occupation of India-Work, age and gender-Occupational heritage of India-Career options-Entrepreneurship and self-employment-Life skills for career building-Career Opportunities-Scope of Human Ecology and Family Sciences in higher education and careers.

(Including all chapters of Pre Mid Term)

PRE BOARD EXAMS

October:-

Unit VI Communication and Extension

Ch-21 Development communication and journalism

Ch-22 Advocacy

November:-

Ch-23 Media management, design and production

Ch-24 Corporate communicationa ndpublic relations

Ch-25 Management of development programs (Including all chapters of Pre Mid Term and Mid Term)

Practicals for Class XII Specializations in HEFS April:-

- 1. Qualitative tests on food adulteration.
- 2. Packaging and study of shelf life of theprepared products.

May:-

3. Development and preparation of supplementary foods for nutrition programmes.

June:- Holiday Homework (Discussion on following topics will be held in class)

4. Planning messages for nutrition, health and life skills using different modes of communication

for

different focal groups.

- Preparation and use of teaching adids, using indigeneous and locally available material to communicate socially relevant messages for children, adolescents and adults in the community.
- 6. Conducting mock sessions among peers in career guidance, nutrition counseling and personal counseling under supervision.
- 7. Analysis and discussion of print, radio, and electronic media with reference to: focus, presentation, technology and cost.

July:-

- 8. Preparation of articles using applied textile design techniques: tie and dye/block printing.
- Application of quality control techniques in garment industry: (a) Fabric Inspection (b) Quality of seams and notions (c) Size labels (d) Packaging
- 10. Care and maintenance of fabric products:(a) Mending (b) Cleaning (c) Storage

August:-

- Open an account in bank/post office. Learn basic banking operations (Mock exercises in the lab with real bank forms)
- 12. Communicating with groups on any one of the following themes-Social messages-gender equality, AIDs, female foeticide, child labour, rights abuse and other such themes)

October:-

 Application of traditional/contemporary techniques of home decorations: (a) Floor and wall decorations (b) Flower arrangement (c) Other forms of local decorations.

November:-

14. Preservation of foods using traditional and /or contemporary methods.

Project:

- 1. Profile any one person with special needs, child or adult: to find out their diet, clothing, activities, physical and phychological needs.
- 2. Observe and document any event in your school/ home or neighbourhood. Evaluate the same with respect to: (a) Its relevance (b) Resource availability and mobilization (c) Planning and execution of the event (d) Financial Implications (e) Feedback from stakeholders Suggest modifiations for the future.

Computer Science

PRE MID TERM

(2nd week of April)

- 1. Classes and Objects
- Need for classes
- Declaration
- Deferencing Members
- Arrays & Classes
- Scope of Class
- Types of Class Functions
- Nesting, Array of Objects
- Objects as FunctionArguments

(3rd week of April)

- 2. Constructors & Destructors
- Need Decleration. Type
- Order of Invocation
- Constructor Overloading, Features
- Destouctors, Needs, Decleration

(4th week of April & 1st week of May)

- 3. Implementation of Data Structure
- Arrays, Operations
- Stocks, Operations
- Queues, Operations

(2nd week of May)

- 4. Inheritance
- Need, types, declarations
- Nestingof classes
- 5. Including class XI C++

Practicals:

Programs of Class

Programs of Constructors & Destructors Programs of Arrays (One Dim, Two Dim)

Description of Arrays (One Dim, Two Di

Programs of Inheritance

MID TERM

(1st week of July)

- 1. Pointers
- Need. Declration
- Memory Map, Memory Allocation
- Pointers & Arrays
- Pointers & Functions
- Pointers & Structures
- Pointers & Objects

(3rd & 4th week of July & 1st week of August)

- 2. Data File Handling
- Opening & Closing of files
- I/O Functions
- Random Access
- Text files
- Binary Files Operations

(2nd, 3rd & 4 week of August)

- 3. Boolean Algebra
- Boolean Terminology
- Boolean Properties
- Boolean Laws

- Simplifications
- SOP and POS
- K-Map
- Logic Gates

(Including Pre mid term)

(1st week of September)

Pracitcals:

Programs of Text Files

Programs of Binary Files

PRE BOARD EXAMS

(1st, 2nd, 3rd, 4th week of October)

- 1. Data base Concepts & SQL
- Need of Database
- Terminology
- Models
- RDBMS Operations
- SQL Commands
- Select, Create, Insert, Update, Alter, Delete, Drop.

(1st, 2nd, 3rd, 4th week of November)

- 2. Communication & Open Source Concepts
- Network, Need, Switching Technology
- Media, Topologies, Devices
- Protocols, Internetworking
- Network Security
- Viruses
- Revision

Practicals:-

SQL Commands

Including whole syllabus.

Entrepreneurship PRE MID TERM

April:-

Unit-1 Entrepreneurial Opportunities

- Sensing entrepreneurial opportunities.
- Environment scanning
- Problem identification
- spotting trend
- creativity and innovation

May:-

Unit-2 Entreprise Planning

- Forms of business organisation
- Sole proprietorship, joint stock company, parnership
- JSC
- HUF
- Co-operative societies

Business plan

- Meaning
- Importance
- Formate
- Type

Project:

Market Survey

- Meaning
- Importance
- Techniques
- IO market survey through question naire

MID TERM

July:-

Unit-3 Enterprise Marketing

- Goals setting-SMART Goals
- Marketing and sales strategy
- Branding
- Promotion
- Negotiations
- Customer relations
- Vendor management
- Building relation
- Business failure

August:-

Unit-4 Enterprise Growth Strategies

- Franchising
- Merger and acquisition
 - Type
 - Importance
 - Failure
- Value Chain and Management

Unit-5 Business Arithmetic

- Unit of sale, unit cost
- Break even analysis
- Importance and use of CFP
- Budgeting
- Finance
- EOQ, ROI/ROE

Project: Business Plan

- BEP
- FA & WC

(Including Unit 1 & 2)

PRE BOARD EXAMS.

October & November:-

Unit-6 Resource Mobilization

- Angel investor
- Venture capital funds
- Capital Market
 - Primary market
 - Secondary markt
- Specialized financial institutions
 - Need

- Importance
- Types

(Including Unit 1, 2, 3, 4, and 5)

Fine Arts PRE MID TERM

April:-

Theory: Rajasthani School of Miniature Paintings

Origin and development

main features

Study of Rajasthani paintings

Practical:- Land scape, Fantasy

May:-

<u>Theory</u>: Mughal School of Miniature Paintings

origin and development

- main features

study of Mughal school paitings

Practical:- Composition

MID TERM

July:-

<u>Theory</u>: Deccan School of Miniature Paintings

origin and development

main features

study of Deccan paintings

Practical: Object-study

August:-

<u>Theory</u>: Pahari School of Miniature Paintings

Origin and development

Main features of Pahari paintings

Study of Pahari paintings

Practical:- Object-study, Flower/leaf study

September:-

Theory: The Bengal school of paintings

Origin and development

Main features of Bengal

Study of Bengal paintings

Evolution of Indian national flag

Contribution of Indian artist

Practical: Object study composition

(Including Pre Mid Term)

PRE BOARD EXAMS.

November:-

Theory: Modern trends in Indian art

Introduction

Study of contemporary painting

Study of Graphic Prints

Practical: Composition Land scape.

December:-

Theory: Study of sculptures Revision

Practical: Composition land scape

(Including whole course)

PRE-MID TERM

April & May:-

Unit-1. Planning in Sports Unit-2. Sports and Nutrition Unit-3. Yoga and Lifestyle.

Unit-4. Physical Education & Sports for CWSN-

Divyang

MID TERM

July to August:-

Unit-5. Children and Women in sports.
Unit-6. Test and Measurement in sports
Unit-7. Phsiology and injuries sports.
Unit-8 Bio-mechanic and sports
Note: Practical:-Physical Fitness Test

PRÉ BOARD EXAMS.

Unit-9. Psychology & Sports Unit-10. Training in Sports

Note: All 10 Units.

Practical:

(i) Physical Fitness Test

(ii) Proficiency in Games & Sports

(iii) Yogic Practices

(iv) Record File, Project File.

Communication Skills

April: Intruduction, Formal Informal

May: Application writing (leave application due

to various reasons)

July: Letter writing (formal-letter of enquiry,

order placement)

August: Advertisement-presentation speech
September: Person to person conversation debate
October: Extempore (speaking instantly on the

given topics)

November: Movie Invisible Man

December: Mind your language-three episodes of

comedy, Group Discussion

LEGAL STUDIES

Book as prescribed by CBSE: Legal Studies XII

PRE MID TERM

April:-

Unit-1. Judiciary

Structure and Hierarchy of Courts, and Legal Offices in India.

Constitution, Roles and Impartiality

Appointments, Trainings, Retirement and Removal of Judges

Courts and Judicial Review

May:-

Unit-2. Topics in Law

- Law of Property
- Law of Contracts
- Law of Torts
- Introduction of Criminal Laws in India
- Administrative Law

MID TERM

July:-

Unit-3. Arbitration------Alternate Dispute Resolution

- Adversarial and Inquisitorial System
- Introduction to Alternative Dispute Resolution
- Types of ADR—Arbitration and Administrative Tribunals
- Mediation and Conciliation

August:-

- Lok Adalats
- Ombudsman
- Lokpal and Lokayukta

Setember:-

Unit-4. Human Rights in India

- Introduction-Historty and International Context
- Constitutional framework and Related laws in India
- Complaint Mechanisms of Quasi judicial Bodies (Including Pre Mid Term course)

PRE BOARD EXAMS.

October:-

Unit-5. Legal Profession in India

- Introduction
- History of legal profession in India-Classification of lawyers, Advocates Act, 1961, Bar Council of India, professional ethics and advertising by awyers, legal education in India, liberalization of profession
- Legal Profession in other

Unit-6 Legal Services

- Introduction
- Brief History of legal services
- Legal background-International law, Indian legal system, Criminal law, efforts bythe State, Ir

NALSA

Regulation

 Criteria for giving free Legal Services-Legal Services

November:-

- Hierarchy of Legal Aid Service Authorities-Central authority, State authority and District Authority and Taluk Committee, Lok Adalat and permanent lok adalat
- Legal aid in context of social justice and human rights
- Funding

Unit-7 International Context:

- Introduction to International Law-History
- Sources of International Law-Treaties, Customs and ICJ Decisions
- International Institutions
- International Human Rights
- Customary International Law
- International law and municipal law
- International Law and India
- Dispute Resolution-ICJ, ICC and other mechanisms
 (Including Pre Mid Term & Mid Term courses)

Project: (Based on Syllabus)

 A detailed analysis of any case law pertaining to any unit from the curriculum. It will be preferred to pick any case law mentioned in the book.

Eg: Maneka Gandhi Vs Union Of India or Kesavananda Bharti case. However, it is open to go beyond the textbook as long as the case elucidates a concept of the book.

 The project should speak of the facts, issue, relevant legislation and discussed precedents and the dicision of the case along with a conclusion which shows how well the concept has been understood.

A viva along with file will be assessed in the following format:

- Presentation and preparation of file-2 marks
- Research-3 marks
- Application of the understanding of legal context-5 marks
- Legal reasoning and logic-5 marks
- Viva-5 marks