

**Lesson Plan 2023-24**  
**Government College, Hansi**

**Unit wise Lesson Plan for ODD Semester Aug.-Dec.-2023**

**Department: Chemistry**

Name of Teacher : Dr. Sudesh

**Class : B.Sc 1st Semester**

**Subject: Inorganic Chemistry**

**Paper : Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	<p>Review of: Bohr's theory and its limitations, dual behaviour of matter and radiation, de Broglie's relation, Heisenberg Uncertainty principle. Hydrogen atom spectra. Need of a new approach to Atomic structure.</p> <p>What is Quantum mechanics? Time independent Schrodinger equation and meaning of various terms in it. Significance of <math>\psi</math> and <math>\psi^2</math>, Schrödinger equation for hydrogen atom. Radial and angular parts of the hydrogenic wavefunctions (atomic orbitals) and their variations for <math>1s</math>, <math>2s</math>, <math>2p</math>, <math>3s</math>, <math>3p</math> and <math>3d</math> orbitals (Only graphical representation).</p>	1st week of August to 4 <sup>th</sup> week of August	Verbly test
Unit 2	<p>Radial and angular nodes and their significance. Radial distribution functions and the concept of the most probable distance with special reference to <math>1s</math> and <math>2s</math> atomic orbitals. Significance of quantum numbers, orbital angular momentum and quantum numbers <math>m_l</math> and <math>m_s</math>. Shapes of <math>s</math>, <math>p</math> and <math>d</math> atomic orbitals, nodal planes. Discovery of spin, spin quantum number (<math>s</math>) and magnetic spin quantum number (<math>m_s</math>).</p> <p>Rules for filling electrons in various orbitals, Electronic configurations of the atoms. Stability of half-filled and completely filled orbitals, concept of exchange energy. Relative energies of</p>	1 <sup>st</sup> week of September to 4 <sup>th</sup> week of September	Ist Assignment in 2 <sup>nd</sup> week of September

	atomic orbitals, Anomalous electronic configurations.		
Unit 3	<i>Ionic Bonding:</i> General characteristics of ionic bonding. Energy considerations in ionic bonding, lattice energy and solvation energy and their importance in the context of stability and solubility of ionic compounds. Statement of Born-Landé equation for calculation of lattice energy, Born-Haber cycle and its applications, polarizing power and polarizability. Fajan's rules, ionic character in covalent compounds, bond moment, dipole moment and percentage ionic character.	1st week of October to 3rd week of October	Minor test in the last week of September
Unit 4	<i>Covalent bonding:</i> VB Approach: Shapes of some inorganic molecules and ions on the basis of VSEPR and hybridization with suitable examples of linear, trigonal planar, square planar, tetrahedral, trigonal bipyramidal and octahedral arrangements.  Concept of resonance and resonating structures in various inorganic and organic compounds.	4th week of October to 1st week of November	2 <sup>nd</sup> Assignment in the first week of October
Revision	Revision, problem solving	2nd and 3rd week of November	

## Lesson Plan

### Government College Hansi

#### Unit wise Lesson Plan for Odd Semester, 2023-24

#### Department - Chemistry

Name of Teacher : **Dr. Sudesh**

Class : **B.Sc 5<sup>th</sup> Semester**

Subject: **POLYMER CHEMISTRY-I (CCL-503(i))**

Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Introduction and history of polymeric materials: Different schemes of classification of polymers, Polymer nomenclature, Molecular forces and chemical bonding in polymers, Texture of polymers. Nature and structure of polymers-Structure and Property relationships.	1st week of August to 1st week of September	Verbly test
Unit 2	Criteria for synthetic polymer formation, classification of polymerization processes, Relationships between functionality, extent of reaction and degree of polymerization.  Bi-functional systems, Polyfunctional systems. Properties of Polymers (Physical, thermal, flow & mechanical properties).	2nd week of September to 1st week of October	Ist Assignment in 1st week of September
Unit 3	Brief introduction to preparation, structure, properties and application of the following polymers: polyolefins, polystyrene and styrene copolymers, poly(vinyl chloride) and related polymers, poly(vinyl acetate) and related polymers, acrylic polymers, fluoro polymers, polyamides and related polymers.	2nd week of October to 3rd week of October	Minor test in the last week of October

Unit 4	Polycarbonates, Phenol formaldehyde resins (Bakelite, Novalac), polyurethanes, silicone polymers, polydienes, Conducting Polymers, [polyacetylene, polyaniline, poly(p-phenylene sulphide polypyrrole, polythiophene)].	4th week of October to 1st week of November	2 <sup>nd</sup> Assignment in the 3 <sup>rd</sup> week of October
Revision	Revision, problem solving	2nd and 3rd week of November	

### Lesson Plan

#### Government College Hansi

#### Unit wise Lesson Plan for Odd Semester, 2023-24

#### Department - Chemistry

Name of Teacher : **Dr. Sudesh**      Class : **B.Sc 5<sup>th</sup> Semester**

Subject: **POLYMER CHEMISTRY-II (CCL-504(i))**

Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Mechanism and kinetics of step growth, radical chain growth, ionic chain (both cationic and anionic) and coordination polymerizations, Mechanism and kinetics of copolymerization, polymerization techniques.	1st week of August to 1st week of September	Verbly test
Unit 2	Determination of crystalline melting point and degree of crystallinity, Morphology of crystalline polymers, Factors affecting crystalline melting point. Glass transition temperature (T <sub>g</sub> ) and determination of T <sub>g</sub> , Free volume theory, WLF equation, Factors affecting glass transition temperature (T <sub>g</sub> ).	2nd week of September to 1st week of October	Ist Assignment in 1st week of October

Unit 3	Determination of molecular weight of polymers ( $M_n$ , $M_w$ , etc) by end group analysis, viscometry, light scattering and osmotic pressure methods. Molecular weight distribution and its significance. Polydispersity index.	2nd week of October to 3rd week of October	Minor test in the last week of October
Unit 4	Polymer Solution: Criteria for polymer solubility, Solubility parameter, Thermodynamics of polymer solutions, entropy, enthalpy, and free energy change of mixing of polymers solutions, Flory- Huggins theory, Lower and Upper critical solution temperatures.	4th week of October to 1st week of November	2 <sup>nd</sup> Assignment in the 3 <sup>rd</sup> week of October
Revision	Revision, problem solving	2nd week of November	

## Government College Hansi

### Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher : **Manjeet Malik**

Class : **B.Sc 1st Semester**

Subject: **Biology-I**

Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	ecosystem; cell; Biology and everyday life; the origin of life; Major events in the history of life; Mechanism of Macroevolution; Phylogeny and the tree of life; Kingdoms of Life; Darwinian view of life and origin of species	1st week of August to 4th week of August	Verbly test
Unit 2	Variation on Mendel's Law; flow of genetic information from DNA to RNA to protein; Genetic Variation; genes and gene activities; Developmental noise; Detecting macromolecules of genetics; Model organisms for the genetic analysis; Distinction between Phenotype and Genotype	1st week of September to 3 <sup>rd</sup> week of September	Ist Assignment in 3 <sup>rd</sup> week of September
Unit 3	Structure of an atom; The energy level of electron; The formation and function of molecules depend on chemical bonding between atoms; Chemical reaction make or break chemical bonds; The water molecule is polar; Properties of water; Ionization of water; Organic chemistry-the study of carbon compounds; what makes carbon special? Properties of organic compounds	4 <sup>th</sup> week of September to 3 <sup>rd</sup> week of October	Minor test in 2nd week of October
Unit 4	Carbohydrates act as fuel and building materials; Lipids are group of hydrophobic molecules; structures and functions of protiens; Role of Nucleic acids in storing and transmitting hereditary information	4th week of October to 1st week of november	2 <sup>nd</sup> Assignement in the 3rd week of october

Revision	Revision, problem solving	1st and 2nd week of November	
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### Lesson plan

#### Government College Hansi

#### Unit wise Lesson Plan for Odd Semester, 2023-24

#### Department - Chemistry

Name of Teacher : Dr.Manjeet Malik

Class : **B.Sc 5<sup>th</sup> Semester**

Subject: **Fuel Chemistry (CCS-505(ii))**

Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Review of energy sources (renewable and non-renewable). Classification of fuels and their calorific value. Coal: Uses of coal (fuel and nonfuel) in various industries, its composition, carbonization of coal. Coal gas, producer gas and water gas—composition and uses. Fractionation of coal tar, uses of coal tar bases chemicals, requisites of a good metallurgical coke, Coal gasification (Hydro gasification and Catalytic gasification), Coal liquefaction and Solvent Refining. Petroleum and Petrochemical Industry: Composition of crude petroleum, Refining and different types of petroleum products and their applications.	1st week of August to 4 <sup>th</sup> week of September	Verbly test and presentation Test in 4th week of September
Unit 2	Fractional Distillation (Principle and process), Cracking (Thermal and catalytic cracking), Reforming Petroleum and non-petroleum fuels (LPG, CNG, LNG, bio-gas, fuels derived from biomass), fuel from waste, synthetic fuels (gaseous and liquids), clean fuels. Petrochemicals: Vinyl acetate, Propylene oxide, Isoprene, Butadiene, Toluene and its derivatives Xylene. Lubricants: Classification of lubricants, lubricating oils (conducting and nonconducting) Solid and semisolid lubricants, synthetic lubricants.	1 <sup>st</sup> week of October to 2nd week of November	Assignment in 3 <sup>rd</sup> week of October

	Properties of lubricants (viscosity index, cloud point, pore point) and their determination.		
Revision	Revision, problem solving	2nd and 3rd week of November	



## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher : Dr. Manjeet Malik

Class : **B.Sc.math(hons.) 1st semester**

Subject:**Chemistry**

Paper : **Theory**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	<p>Chemical Thermodynamics :Objectives and limitations of Chemical Thermodynamics, state functions, thermodynamic equilibrium, work, heat, internal energy, enthalpy. First Law of Thermodynamics: First law of thermodynamics for open, closed and isolated systems. Reversible isothermal and adiabatic expansion/compression of an ideal gas.Irreversible isothermal and adiabatic expansion.Enthalpy change and its measurement, standard heats of formation and absolute enthalpies.Kirchoff's equation.</p> <p>Second and Third Law: Various statements of the second law of thermodynamics. Efficiency of a cyclic process (Carnot's cycle). Entropy: Entropy changes of an ideal gas with changes in P,V, and T. Free energy and work functions. Gibbs-Helmholtz Equation, Criteria of spontaneity in terms of changes in free energy.Introduction to Third law of thermodynamics.</p>	1st week of August to 4th week of August	Test in 1st week of September
Unit 2	Arrhenius theory of electrolytic dissociation.Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes.Molar conductivity at infinite dilution.Kohlrausch law of independent migration of ions.Ionic velocities, mobilities and their determinations, transference numbers and their relation to ionic mobilities, determination of transference numbers using Hittorf and Moving Boundary methods.Applications of conductance to	1st week of September to 4th week of September	1st Assignment in the last week of September

	<p>measure degree of dissociation of weak electrolytes.</p> <p>Quantitative aspects of Faraday's laws of electrolysis, rules of oxidation/reduction of ions based on half cell potentials, application of electrolysis in metallurgy and industry. Chemical cells with examples; Standard electrode (reduction) potential.</p>		
Unit 3	<p>Electronic Displacements: Inductive Effect, Electromeric Effect, Resonance and Hyperconjugation. Cleavage of Bonds: Homolysis and Heterolysis. Structure, shape and reactivity of organic molecules: Nucleophiles and electrophiles. Reactive Intermediates: Carbocations, Carbanions and free radicals. Strength of organic acids and bases: Comparative study with emphasis on factors affecting pK values.</p>	1st week of October to 3rd week of October	2 <sup>nd</sup> Assignment in the 3rd week of October
Unit 4	<p>Conformations with respect to ethane, butane and cyclohexane. Interconversion of Wedge Formula, Newmann, Sawhorse and Fischer representations. Concept of chirality (upto two carbon atoms). Configuration: Geometrical and Optical isomerism; Enantiomerism, Diastereomerism and Meso compounds). Threo and erythro; D and L; cis-trans nomenclature; CIP Rules: R / S (for upto 2 chiral carbon atoms) and E / Z Nomenclature (for upto two C=C systems).</p> <p>Chemistry of Biomolecules : Occurrence, classification of Carbohydrates. Amino acids, peptides and their classification. <math>\alpha</math>-Amino Acids . Zwitterions, pK values, isoelectric point, components of nucleic acids, nucleosides and nucleotides.</p>	4th week of October to 1st week of November	
	Revision	2nd week of November	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Chemistry**

Name of Teacher: Priyanka Punia

Class: B.Sc3rd NM

Subject: Chemistry

Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	<p>Structure, bonding and properties (acidic/ basic nature, oxidizing/ reducing nature and hydrolysis of the</p> <p>Following compounds and their applications in industrial and environmental chemistry wherever</p> <p>Applicable:</p> <p>Diborane and concept of multicentre bonding, hydrides of Groups 13 (EH<sub>3</sub>), 14, 15, 16 and 17.</p> <p>Oxides of N and P, Oxoacids of P, S and Cl.</p>	<p>24-07-2023 to</p> <p>15-08-2023</p>	
<b>Unit-2</b>		<p>16-08-2023 to</p>	Test

	<p>Halides and oxohalides of P and S (<math>\text{PCl}_3</math>, <math>\text{PCl}_5</math>, <math>\text{SOCl}_2</math> and <math>\text{SO}_2\text{Cl}_2</math>) Interhalogen compounds.</p> <p>A brief idea of pseudohalides</p>	11-09-2023	
<b>Unit-3</b>	<p>Noble gases: Rationalization of inertness of noble gases, clathrates, preparation and properties of <math>\text{XeF}_2</math>,</p> <p><math>\text{XeF}_4</math> and <math>\text{XeF}_6</math>, bonding in these compounds using VBT and shapes of noble gas compounds using VSEPR</p> <p>Theory</p>	12-09-2023 to 07-10-2023	Assignment
<b>Unit-4</b>	<p>Inorganic Polymers: Types of inorganic polymers and comparison with organic polymers, structural</p>	08-10-2023 to 10-11-2023	

	<p>Features, classification and important applications of silicates. Synthesis, structural features and</p> <p>Applications of silicones. Borazines and cyclophosphazenes – preparation, properties and reactions.</p> <p>Bonding in <math>(\text{NPCl}_2)</math></p>		
<b>Revision</b>	Revision of the Syllabus	15-11-2023 to Exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Chemistry**

Name of Teacher: Priyanka Punia

Class: B.Sc3red NM

Subject: Chemistry

Paper: Chemistry of Main Group Elements 1

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	<p>Acids and Bases: Bronsted–Lowry concept, conjugate acids and bases, relative strengths of acids and</p> <p>Bases, effects of substituent and solvent, differentiating and levelling solvents. Lewis acid-base concept,</p> <p>Classification of Lewis acids and bases, Lux-Flood concept and solvent system concept. Hard and soft</p> <p>Acids and bases (HSAB concept), applications of HSAB process</p>	<p>24-07-2023 to</p> <p>15-08-2023</p>	
<b>Unit-2</b>	General Principles of Metallurgy: Chief modes of occurrence of metals based on standard electrode	<p>16-08-2023 to</p> <p>11-09-2023</p>	Test

	<p>Potentials, Ellingham diagrams for reduction of metal oxides using carbon and carbon monoxide as</p> <p>Reducing agents.</p> <p>Hydrometallurgy with reference to cyanide process for gold and silver. Methods of purification of</p> <p>Metals (Al, Pb, Ti, Fe, Cu, Ni, Zn, Au): electrolytic refining, zone refining, van Arkel-de Boer process,</p> <p>Parting Process, Mond's process and Kroll Process.</p>		
<b>Unit-3</b>	s- and p-Block Elements	<p>12-09-2023 to</p> <p>07-10-2023</p>	Assignment

	<p>Periodicity in s- and p-block elements with respect to electronic configuration, atomic and ionic size,</p> <p>Ionization enthalpy, electron gain enthalpy, electronegativity (Pauling scale).</p> <p>General characteristics of s-block metals like density, melting and boiling points, flame colour and</p> <p>Reducing nature.</p> <p>Oxidation states of s- and p-block elements, inert-pair effect, diagonal relationships and anomalous</p> <p>Behaviour of first member of each group. Allotropy in C, P and S.</p>		
<b>Unit-4</b>	<p>Complex forming tendency of s block elements and a preliminary idea of crown ethers and cryptates,</p> <p>Structures of basic beryllium acetate, salicylaldehyde/ acetylacetonato complexes of Group 1 metals.</p>	<p>08-10-2023 to</p> <p>10-11-2023</p>	



	<p>Solutions of alkali metals in liquid ammonia and their properties.</p> <p>Common features, such as ease of formation, solubility and stability of oxides, peroxides, superoxides,</p> <p>Sulphates and carbonates of s-block metals.</p>		
<b>Revision</b>	Revision of the Syllabus	15-11-2023 to Exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Chemistry**

Name of Teacher: Priyanka Punia

Class: B.Sc.I NM

Subject: Chemistry

Paper: Organic Chemistry

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Physical Effects, Electronic Displacements: Inductive Effect, Electromeric Effect,  Resonance and Hyperconjugation. Cleavage of Bonds: Homolysis and  Heterolysis.  Structure, shape and reactivity of organic molecules: Nucleophiles and  Electrophiles. Reactive Intermediates: Carbocations, Carbanions and free radicals.  Strength of organic acids and bases: Comparative study with emphasis on factors  Affecting pK values. Aromaticity: Benzenoids and Hückel's rule.	24-07- 2023 to  15-08- 2023	

<b>Unit-2</b>	<p>Conformations with respect to ethane, butane and cyclohexane. Interconversion of</p> <p>Wedge Formula, Newmann, Sawhorse and Fischer representations. Concept of</p> <p>Chirality (upto two carbon atoms). Configuration: Geometrical and Optical</p> <p>Isomerism; Enantiomerism, Diastereomerism and Meso compounds). Threo and</p> <p>Erythro; D and L; cis – trans nomenclature; CIP Rules: R/ S (for upto 2 chiral</p> <p>Carbon atoms) and E / Z Nomenclature (for upto two C=C systems).</p>	<p>16-08-2023 to</p> <p>11-09-2023</p>	Test
<b>Unit-3</b>		<p>12-09-2023 to</p> <p>07-10-2023</p>	Assignment

	<p>Alkanes: (Upto 5 Carbons). Preparation: Catalytic hydrogenation, Wurtz</p> <p>Reaction, Kolbe's synthesis, from Grignard reagent. Reactions: Free radical</p> <p>Substitution: Halogenation.</p> <p>Alkenes: (Upto 5 Carbons) Preparation: Elimination reactions: Dehydration of</p> <p>Alkenes and dehydrohalogenation of alkyl halides (Saytzeff's rule); cis alkenes</p> <p>(Partial catalytic hydrogenation) and trans alkenes (Birch reduction). Reactions:</p> <p>Cis-</p> <p>Addition (alk. <math>\text{KMnO}_4</math>) and trans-addition (bromine), Addition of <math>\text{HX}</math></p> <p>(Markownikoff's and anti-Markownikoff's addition), Hydration, Ozonolysis,</p> <p>Oxymecuration-demercuration, Hydroboration-oxidation.</p>		
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<b>Unit-4</b>	<p>Alkynes: (Upto 5 Carbons) Preparation: Acetylene from <math>\text{CaC}_2</math> and conversion</p> <p>Into higher alkynes; by dehalogenation of tetra halides and dehydrohalogenation of</p> <p>Vicinal-dihalides.</p> <p>Reactions: formation of metal acetylides, addition of bromine and alkaline</p> <p><math>\text{KMnO}_4</math>, ozonolysis and oxidation with hot alk. <math>\text{KMnO}_4</math>.</p>	<p>08-10- 2023 to</p> <p>10-11- 2023</p>	
<b>Revision</b>	<p>Revision of the Syllabus</p>	<p>15-11- 2023 to</p> <p>Exam</p>	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Chemistry**

Name of Teacher: Renu Rani

Class: B.Sc. 3<sup>rd</sup> Sem NM

Subject: Chemistry

Paper: Physical Chemistry-2(CCL-304)

Unit	Description of Chapter / Topics	Schedule/ Duration	Assignment / Test
<b>Unit-1</b>	<b>Solutions</b>  Thermodynamics of ideal solutions: Ideal solutions and Raoul's law, deviations from Raoul's law – non-ideal solutions. Vapour pressure-composition and temperature composition curves of ideal and non-ideal solutions. Distillation of solutions. Azeotropes. Colligative properties of solutions. Thermodynamic derivations of relation between amount of solute and elevation in boiling point and depression in freezing point. Partial miscibility of liquids: Critical solution temperature; effect of impurity on partial miscibility of liquids. Immiscibility of liquids- Principle of steam distillation.	4 <sup>th</sup> week of July- 1 <sup>st</sup> week of August	<b>Test-2<sup>nd</sup></b> week of August  <b>Assignment 1- 3<sup>rd</sup></b> Week of August
<b>Unit-2</b>	<b>Phase Equilibrium</b>  Phases, components and degrees of freedom of a system, criteria of phase equilibrium. Gibbs Phase Rule and its thermodynamic derivation. Derivation of Clausius – Clapeyron equation and its importance in phase equilibria. Phase diagrams of one-component systems (water and sulphur) and two component systems involving eutectics, congruent and incongruent melting points (lead-silver, and Na-K only).	2 <sup>nd</sup> Week of August – mid of 3 <sup>rd</sup> week of August	<b>Test-</b> 3 <sup>rd</sup> week of August
<b>Unit 3</b>	<b>Conductance</b>  Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes. Kohlrausch law of independent migration of ions.	4 <sup>th</sup> Week of August- 1 <sup>st</sup> week of September	<b>Test-</b> 4 <sup>th</sup> Week of August

	Transference number, ionic mobility. Applications of conductance measurements: determination of degree of ionization of weak electrolyte, solubility and solubility products of sparingly soluble salts, ionic product of water, hydrolysis constant of a salt. Conductometric titrations (only acid-base). Concept of pH and pK <sub>a</sub> , buffer solution, buffer action, Henderson Hazel Blac equation.		<b>Assignment 2-</b> 2 <sup>nd</sup> Week of September
<b>Unit-4</b>	<b>Electrochemistry</b>  Reversible and irreversible cells. Concept of EMF of a cell. Measurement of EMF of a cell. Nernst equation and its importance. Types of electrodes. Standard electrode potential. Electrochemical series. Thermodynamics of a reversible cell, calculation of thermodynamic properties: $\Delta G$ , $\Delta H$ and $\Delta S$ from EMF data. Calculation of equilibrium constant from EMF data. Concentration cells with transference and without transference. Liquid junction potential and salt bridge. pH determination using hydrogen electrode and quinhydrone electrode. Potentiometric titrations - qualitative treatment (acid-base and oxidation-reduction only).	2 <sup>nd</sup> Week of September- mid of third week of September	<b>Test-3<sup>rd</sup> Week of</b> September
<b>Revision</b>	Problems and Revision of all 4 units	3 <sup>rd</sup> week of November	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Chemistry**

Name of Teacher: Renu Rani

Class: B.Sc. 3<sup>rd</sup> Sem NM

Subject: Chemistry

Paper: Organic Chemistry (CCL-305)

Unit	Description of Chapter / Topics	Schedule/ Duration	Assignment / Test
<b>Unit-1</b>	<p><b>Carboxylic acids and their derivatives</b></p> <p><i>Preparation:</i> Acidic and Alkaline hydrolysis of esters.</p> <p><i>Reactions:</i> Hell-Vohland-Zelinsky Reaction. (Upto 5 carbons) <i>Preparation</i> Acid chlorides, Anhydrides, Esters and Amides from acids and their interconversion.</p> <p><i>Reactions:</i> Comparative study of nucleophilicity of acyl derivatives. Reformatsky Reaction, Perkin condensation</p>	4 <sup>th</sup> week of September- 1 <sup>st</sup> week of October	<p><b>Test-</b> 1<sup>st</sup> Week of October</p> <p><b>Assignment 1-</b> 4<sup>th</sup> Week of September</p>
<b>Unit-2</b>	<p><b>Amines and Diazonium Salts</b></p> <p>Amines (Aliphatic and Aromatic) (Upto 5 carbons)</p> <p><i>Preparation:</i> from alkyl halides, Gabriel's Phthalimide synthesis, Hofmann Bromamide reaction,</p> <p><i>Reactions:</i> Hofmann vs. Saytzeff elimination, Carbylamine test, Hinsberg test, with HNO<sub>2</sub>, Schotten-Baumann Reaction. Electrophilic substitution (case aniline): nitration, bromination, sulphonation.</p> <p><b>Diazonium salts:</b></p> <p><i>Preparation:</i> from aromatic amines. <i>Reactions:</i> conversion to benzene, phenol, dyes</p>	2 <sup>nd</sup> Week of October-3 <sup>rd</sup> week of October	<p><b>Test-</b> 3<sup>rd</sup> Week of October</p> <p><b>Assignment 2-</b> 2<sup>nd</sup> Week of October</p>



<b>Unit 3</b>	<p><b>Amino Acids,Peptides and Proteins</b></p> <p><i>Preparation of Amino Acids:</i> Strecker synthesis using Gabriel's phthalimide synthesis. Zwitterion, Isoelectric point and Electrophoresis.</p> <p><i>Reactions of Amino acids:</i> ester of –COOH group, acetylation of –NH<sub>2</sub> group, complexation with Cu<sup>2+</sup> ions, ninhydrin test.</p> <p>Overview of Primary, Secondary, Tertiary and Quaternary Structure of proteins.</p> <p>Determination of Primary structure of Peptides by degradation Edmann degradation (N-terminal) and C-terminal (thiohydantoin and with carboxypeptidase enzyme).</p> <p>Synthesis of simple peptides (upto dipeptides) by N-protection (t-butyloxycarbonyl and phthaloyl) &amp; C-activating groups and Merrifield solid-phase synthesis</p>	3 <sup>rd</sup> Week of October -4 <sup>th</sup> Week of October	<b>Test-</b> 1 <sup>st</sup> Week of November
<b>Unit-4</b>	<p><b>Carbohydrates:</b></p> <p>Classification, and General Properties, Glucose and Fructose (open chain and cyclic structure), Determination of configuration of monosaccharides, absolute configuration of Glucose and Fructose, Mutarotation, Ascending and descending in monosaccharides. Structure of disacharrides (sucrose, cellobiose, maltose, lactose)</p> <p>Polysacharrides (starch and cellulose) excluding their structure elucidation.</p>	1 <sup>st</sup> Week of November- 2 <sup>nd</sup> week of November	<b>Test-</b> 2 <sup>nd</sup> Week of November
<b>Revision</b>	Problems and Revision of all units.	3 <sup>rd</sup> week of November	

Unit-1	<p>AJMER SINGH [COMMERCE]</p> <p>CORPORATE ACCOUNTING, B.COM 3<sup>RD</sup> SEM</p> <p>VALUATION OF GOODWILL AND SHARES</p> <p>ISSUE OF SHARES , FORFEITURE, RE-ISSUE,BUY BACK AND BOOK BUILDING, BONUS SHARES.</p> <p>ISSUE OF DEBENTURES,</p>	01AUG-31 AUG. 2023	
UNIT-2 AND 3	<p>FINAL ACCOUNTS OF COMPANIES</p> <p>ACCOUNTS OF HOLDING COMPANIES</p> <p>REDEMPTION OF PREFERENCE SHARE</p> <p>REDEMPTION OF DEBENTURES</p>	<p>01 SEPT. - 30 SEPT.2023</p> <p>01 /10/2023 TO 31/10/23</p>	
UNIT-4	<p>INTERNAL RECONSTRUCTION OF COMPANIES</p> <p>AMALGAMATION OF COMPANIES</p> <p>TEST -01 AND TEST- 02</p> <p>ASSIGNMENTS AND VIVA</p>	<p>01/11/23— 30/11/23</p> <p>01/12/23 TO 15/12/23</p>	

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**MR. AJMER SINGH, HUMAN RESOURCE PLANNING, M.COM 3<sup>RD</sup> SEM.**

UNIT	TOPICS	PERIOD
1.	HRP-CONCEPTS, OBJECTIVES, PROBLEMS, STRATEGIES, JOB ANALYSIS, HRP PROCEDURE AND ACTION PLAN	01-31 AUG.23  AS-01
2.	HR DMAND AND SUPPLY FORECASTING-ASSESSMENT AND TEECHN IQUES, SELECTION, SEPARATION.	01-30  SEPT. 23  AS-02
3.	RETENTION , TRAINNING AND REDEPLOYMENT, PRODUCTIVITY MGT, AND HR PLANNING, WORK STUDY, METHOD STUDY, WORK MEASUREMENT	01-31  OCT. 23  TEST-01 AND 02  PRESENTATION
4.	JOB DESIGN WORK SCHEDULING, HRP IN CHANGING CONTEXT, HR INFO, SYSTEM.  HR ACCOUNTING AND AUDITING.  STRUCTURE OF LABOUR FORCE.  DMOGRAPHIC CHANGES	01-25  NOV. 23  VIVA ,GD

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MR. AJMER SINGH, HUMAN RESOURCE PLANNING, M.COM 3<sup>RD</sup> SEM.

UNIT	TOPICS	PERIOD
1.	HRP-CONCEPTS, OBJECTIVES, PROBLEMS, STRATEGIES, JOB ANALYSIS, HRP PROCEDURE AND ACTION PLAN	01-31 AUG.23  AS-01
2.	HR DEMAND AND SUPPLY FORECASTING-ASSESSMENT AND TECHNIQUES, SELECTION, SEPARATION.	01-30  SEPT. 23  AS-02
3.	RETENTION, TRAINING AND REDEPLOYMENT, PRODUCTIVITY MGT, AND HR PLANNING, WORK STUDY, METHOD STUDY, WORK MEASUREMENT	01-31  OCT. 23  TEST-01 AND 02  PRESENTATION
4.	JOB DESIGN WORK SCHEDULING, HRP IN CHANGING CONTEXT, HR INFO, SYSTEM.  HR ACCOUNTING AND AUDITING.	01-25  NOV. 23

	STRUCTURE OF LABOUR FORCE.  DMOGRAPHIC CHANGES	VIVA ,GD
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LESSION PLAN --- SALES AND DISTRIBUTION MANAGEMENT, M.COM 3<sup>RD</sup> SEM.  
MR. AJMER SINGH

UNIT-1	SALES MGT-ROLS NATURES, RESPONSIBILITEES,SKILLS, SELLING THEORIES SALES PLANNING AND FORECASTING ORGANISATIONAL STRUCTURES	01-31 AUG.23  TEST-01
UNIT-2	FIELD SALES ORG. SALES FORCE SIZE,TERRITORY MGT,ROUTING,QUOTA, RECRUITMENT,SELECTION ,TRAINNING, COMPANSATION, MOTIVATION, LEADERSHIP	01-30 SEPT. 23  TEST-02
UNIT-3	SALES MEETING AND CONTESTS, CONTROL PROCSS,COST AND PROFIT ANALYSIS, EVALUATING SALES FORCE,ETHICAL ISSUES,	01-31 OCT. 2023  AS-1 AND AS-2, VIVA
UNIT-4	DISTRIBUTION CHANNEELS- ROLES AND FACTORES AFFECTING, CHANNELS BEHAVIOURS, CHANNEL DESIGN DECISION, CHANNEL MGT DECISION,INTENSITY AND PARTERNERING RELATIONSHIP	01-25 NOV. 23  PRESENTATION GD





## **Lesson Plan-2023-24**

**Subject: Computer Application in Business**

**Class: B.Com Ist (Sem)**

**Name: Mohinder Singh**

<b>Sr. No</b>	<b>Date</b>	<b>Theory</b>	<b>Parctical</b>
<b>1</b>	<b>24-07-2023 to 31-07-2023</b>	<b>Introduction of Computer and Components</b>	<b>MS-Word</b>
<b>2</b>	<b>01-08-2023 to 15-08-2023</b>	<b>Characteristics of Computer Input and Output Devices and Memory</b>	<b>MS-Word</b>
<b>3</b>	<b>16-08-2023 to 31-08-2023</b>	<b>Modern CPU and Processor Software and Its types, Programming Language</b>	<b>MS-Word</b>
<b>4</b>	<b>01-09-2023 to 15-09-2023</b>	<b>Information System Need of, Data and Information System</b>	<b>MS-Excel</b>
<b>5</b>	<b>16-09-2023 to 30-09-2023</b>	<b>Advantage of Information System and Type of</b>	<b>MS-Excel</b>
<b>6</b>	<b>01-10-2023 to 15-10-2023</b>	<b>IT Introduction, Need and Application of IT</b>	<b>MS-Power- Point</b>
<b>7</b>	<b>15-10-2023 to 30-10-2023</b>	<b>Impact of IT on Business E-Commerce and Its Advantages</b>	<b>MS- Power- Point</b>

8	30-10-2023 to 15-11-2023	E-Business and Introduction of E-Business	MS-Power-Point and Revision
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**CLASS:B.Com.-III Year ( V Sem)(2023-24) NAME OF PAPER –Income Tax****PAPER CODE – BCOM 504**

Teacher name- Shamendra Bamal

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b>	Basic concepts of Income Tax: Assessee, Person; Income; Agricultural income; Previous year; Assessment year; Gross total income; Total income;
		<b>2<sup>nd</sup> week</b>	Advance Tax; Tax deducted at source;
		<b>3<sup>rd</sup> week</b>	Distinction between Capital and Revenue Receipts and Expenditure.
		<b>4<sup>th</sup> week</b>	Residential Status & Basis of Charge
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b>	Residential Status & Basis of Charge
		<b>2<sup>nd</sup> week</b>	Scope of Total Income; Tax Rates; income which does not form part of total income; Tax Management: Tax evasion, Avoidance and Tax planning.
		<b>3<sup>rd</sup> week</b>	Computation of Income under Various Heads: Income from Salary
		<b>4<sup>th</sup> week</b>	Computation of Income under Various Heads: Income from Salary
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b>	Computation of Income under Various Heads: Income from Salary
		<b>2<sup>nd</sup> week</b>	Income from House Property;
		<b>3<sup>rd</sup> week</b>	Profit and Gains of Business or Profession;
		<b>4<sup>th</sup> week</b>	Capital Gains; Income from Other Sources.
<b>4.</b>	<b>November</b>	<b>1<sup>st</sup> week</b>	Clubbing provisions and Set Off and Carry Forward of Losses; Deductions from Gross Total Income:
		<b>2<sup>nd</sup> week</b>	Deductions in respect of certain payments; Specific deductions in respect of certain income; Rebates and Reliefs.
		<b>3<sup>rd</sup> week</b>	Revision
		<b>4<sup>th</sup> week</b>	Revision

CLASS:M.Com.-II Year ( III Sem)(2023-24)

NAME OF PAPER – **MC-301 CORPORATE GOVERNANCE AND BUSINESS ETHICS**

Teacher name- Shamendra Singh

SR. NO.	MONTHS	PERIOD	TOPICS
1.	August	1 <sup>st</sup> week	Evolution of corporate governance; developments in India; regulatory framework of corporate governance in India;
		2 <sup>nd</sup> week	SEBI guidelines on corporate governance;
		3 <sup>rd</sup> week	reforms in the Companies Act.
		4 <sup>th</sup> week	Corporate management vs. governance; internal constituents of the corporate governance
2.	September	1 <sup>st</sup> week	key managerial personnel (KMP); chairman-qualities of a chairman, powers, responsibilities and duties of a chairman;
		2 <sup>nd</sup> week	chief executive officer (CEO), role and responsibilities of the CEO.
		3 <sup>rd</sup> week	Introduction to Business Ethics: The concept, nature and growing significance of Ethics in Business, Ethical Principles in Business,
		4 <sup>th</sup> week	Ethics in Management, Theories of Business Ethics, Ethical Issues in Business,
3.	October	1 <sup>st</sup> week	Business Ethics in 21st Century
		2 <sup>nd</sup> week	Ethics in various functional areas of Business:
		3 <sup>rd</sup> week	Ethics in Finance,
		4 <sup>th</sup> week	Ethics in HRM, Ethics in Marketing,
4.	November	1 <sup>st</sup> week	Ethics in Production and Operation Management.
			Ethics in Production and Operation Management.
		2 <sup>nd</sup> week	Revision
			Revision
		3 <sup>rd</sup> week	

		<b>4<sup>th</sup> week</b>	
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CLASS:M.Com.-2<sup>nd</sup> Year ( III Sem.)(2023-24)

NAME OF PAPER – **OE - 303 PERSONAL FINANCE**

Teacher name- Shamendra Singh

SR. NO.	MONTHS	PERIOD	TOPICS
1.	August	1 <sup>st</sup> week	Personal Finance: Meaning and importance. Financial planning: meaning, process and role of financial planner.
		2 <sup>nd</sup> week	Risk profiling: client data analysis, life cycle, wealth cycle.
		3 <sup>rd</sup> week	Asset allocation: Strategic, Tactical, Fixed and Flexible.
		4 <sup>th</sup> week	Risk Management: Meaning, process and importance.. Life Insurance and General Insurance.
2.	September	1 <sup>st</sup> week	Distinguish between risk assessment, risk management and risk avoidance
		2 <sup>nd</sup> week	Assessment of requirement of Health Insurance,
		3 <sup>rd</sup> week	Choice of products for risk coverage
		4 <sup>th</sup> week	Investment Management: meaning and importance.
3.	October	1 <sup>st</sup> week	Investment avenues: equity, debt, gold, real estate, mutual funds, exchange traded funds.
		2 <sup>nd</sup> week	Portfolio management: meaning, construction, evaluation and revision.
		3 <sup>rd</sup> week	Loan management: meaning, types, importance and assessment, personal, car loan, home Loan etc.
		4 <sup>th</sup> week	Tax planning: basics terms of income tax, advance tax, tax deduction at source,
4.	November	1 <sup>st</sup> week	deductions under section 80C, 80 CCC, 80 D and 80 G. Taxation of investment products.
		2 <sup>nd</sup> week	Retirement planning, Management of nomination, power of attorney and will
		3 <sup>rd</sup> week	Revision
		4 <sup>th</sup> week	Revision

Name  
of

**GOVERNMENT COLLEGE HANSI**  
**Department of Commerce**  
**Lesson Plan for Odd Semester 2023-24**

Teacher: **Shiv Kumar**  
Subject: **e-Commerce**

Class: **M.Com. Sem. - 1**  
Paper: **MC-106**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Technology and Infrastructure for E-Commerce: Framework of E-commerce; Network Infrastructure for E-Commerce – Market Forces Influencing I-way, Network Access Equipment, Public Policy Issues Shaping the I-way; EDI - Applications in Business, Legal, Security and Privacy Issues of EDI; Components of EDI Standards, ASC X12 and EDIFACT.	4 Weeks	Project 1 and Assignment 1 2 <sup>nd</sup> Week of October
<b>Unit-2</b>	E-Commerce and Retailing: Changing Retail Industry Dynamics, Mercantile Models from the Consumer's Perspective, Management Challenges in Online Retailing. Intranets and Customer Asset Management: Basics of Customer Asset Management, Online Sales Force, Online Customer Service and Support, Technology and Marketing Strategy.	2 Weeks	Test 1 4 <sup>th</sup> Week of October
<b>Unit-3</b>	Intranets and Manufacturing: Integrated Logistics, Agile Manufacturing, Emerging Business Requirements, Manufacturing Information Systems, Intranet-based Manufacturing, Logistics Management. E-Commerce and Online Publishing: Why Online Publishing, Online Publishing approaches, Advertising and Online Publishing. E-Commerce and Banking: Changing Dynamics in the Banking Industry, Home Banking Implementation Approaches, Management Issues in Online Banking.	3 Weeks	Assignment 2 2 <sup>nd</sup> Week of November
<b>Unit-4</b>	Intranets and Corporate Finance: An Introduction, Financial Systems, Financial Intranets, Software Modules in Financial Information Systems, Human Resource Management Systems, Size/Structure of Financial Software Market.	3 Weeks	Viva-voce Exam 1 <sup>st</sup> Week of November

*Shiv Kumar*  
Assistant Professor (Commerce)

**GOVERNMENT COLLEGE HANSI**  
**Department of Commerce**  
**Lesson Plan for Odd Semester 2023-24**

Name of Teacher: **Shiv Kumar**  
Subject: **Computerized Accounting System**

Class: **B.Com. Sem. - 3**  
Paper: **BCOM 304**

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Introduction: installation of Tally, ERP9 – Licensing configurations – Tally Vault Password – Security Control in Tally, ERP9 – Splitting Company Data – Backup and Restore.	3 Weeks	Project 1 and Assignment 1 2 <sup>nd</sup> Week of October
<b>Unit-2</b>	Accounting: voucher entry, budget, cost center, balance sheet, profit and loss account, currency, debit note, credit note, interest calculation.	3 Weeks	Test 2 4 <sup>th</sup> Week of October
<b>Unit-3</b>	Inventory: stock item, sales order, purchase order, delivery note, rejection out. Computerized Tax Liability Calculation.	3 Weeks	-
<b>Unit-4</b>	Payroll: Salary Accounting – Introduction to Payroll – Payroll Masters – Payroll Vouchers – Overtime Payment – Gratuity – Advanced Payroll Transactions Basic Salary, Overtime, Bonus, Gratuity, Loan, ESI, Provident Fund, Pension, Commission.	3 Weeks	Viva-voce Exam 1 <sup>st</sup> Week of November

*Shiv Kumar*  
Assistant Professor (Commerce)



**Govt. College Hansi**

**Lesson Plan**

Unit wise lesson plan for the Odd Semester, 2023-24

Teacher: **Vijay Kumar Yadav** Class: **B. Com 2<sup>nd</sup> Year (Only Wed, Thu, Fri & Sat)**

Subject: **Fundamentals of Insurance (BCOM 306(ii))** Section:  
**NA**

<b>Sr. No.</b>	<b>Description of Chapters/Topics</b>	<b>Expected Duration</b>	<b>Assignment/Te st</b>
<b>1</b>	Introduction of insurance: Life and general insurance, purpose, need and principles of insurance as a social security tool.	1 <sup>st</sup> Week of August to 3 <sup>rd</sup> Week of August	
<b>2</b>	Fire insurance: principles of fire insurance contracts, fire insurance policy, conditions, assignment of policy, claims settlement procedure.	4 <sup>th</sup> Week of August to 2 <sup>nd</sup> Week of September	1 <sup>st</sup> assignment in the first week of September
<b>3</b>	Marine insurance: Marine insurance policy and its conditions, premium, double insurance, assignment of policy, warranties, voyage, loss and abandonment, partial losses and particular charges, salvage, total losses and measures of indemnity, claims settlement procedures.	3 <sup>rd</sup> Week of September to 1 <sup>st</sup> Week of October	-Minor test 1 in the third week of September -2 <sup>nd</sup> assignment in the first week of October
<b>4</b>	Accident and motor insurance: policy and claims settlement procedures, insurance intermediaries-role of agents and procedure for becoming an agent, cancellation of license, revocation/suspension/termination of agent appointment, code of conduct, unfair practices.	2 <sup>nd</sup> Week of October to 1 <sup>st</sup> Week of November	-Minor test 2 in the second week of October -Quiz in fourth week of October

**VIJAY KUMAR YADAV**

(Asst. Professor of Commerce)

**Govt. College Hansi**

**Lesson Plan**

Unit wise lesson plan for the Odd Semester, 2023-24

Teacher: **Vijay Kumar Yadav**

Class: **B. Com 3<sup>rd</sup> Year**

Subject: **Management Accounting (BCOM 501)**

Section: **B**

<b>Sr. No.</b>	<b>Description of Chapters/Topics</b>	<b>Expected Duration</b>	<b>Assignment/Test</b>
<b>1</b>	Management accounting: meaning, scope, importance and techniques. Distinction between financial accounting and management accounting, Distinction between cost accounting and management accounting,	1 <sup>st</sup> Week of August to 3 <sup>rd</sup> Week of August	
<b>2</b>	Budgeting and budgetary control: Concept of Budgeting and budgetary control, Objective and advantages of budgetary control, Types of budgets and their preparation, Essentials of a budgetary control system, Performance budgeting and zero-base Budgeting.	4 <sup>th</sup> Week of August to 2 <sup>nd</sup> Week of September	1 <sup>st</sup> assignment in the first week of September
<b>3</b>	Marginal costing: Meaning, Nature, Uses and Limitations, Break-even Analysis, PV Ratio, Margin of safety, Angle of Incidence, Decision involving alternative Choices.	3 <sup>rd</sup> Week of September to 1 <sup>st</sup> Week of October	-Minor test 1 in the third week of September -2 <sup>nd</sup> assignment in the first week of October
<b>4</b>	Financial analysis: Meaning, and Importance, Ratio analysis: Meaning, importance, limitations and calculations of ratios. Cash flow statement: Uses and preparation.	2 <sup>nd</sup> Week of October to 1 <sup>st</sup> Week of November	-Minor test 2 in the second week of October -Quiz in fourth week of October

**Govt. College Hansi**

**Lesson Plan**

Unit wise lesson plan for the Odd Semester, 2023-24

Teacher: **Vijay Kumar Yadav**

Class: **B. Com 3<sup>rd</sup> Year**

Subject: **Banking Law and Practice (BCOM 503)**

Section: **B**

<b>Sr. No.</b>	<b>Description of Chapters/Topics</b>	<b>Expected Duration</b>	<b>Assignment/Te st</b>
<b>1</b>	Origin and evolution of banks- Meaning and definition of banking, Structure of Indian Banking System- Classification of banks, Functions of commercial banks, Regulatory framework and Compliances- Banking Regulation Act, 1949, Prevention of Money Laundering Act, 2002.	1 <sup>st</sup> Week of August to 3 <sup>rd</sup> Week of August	
<b>2</b>	Banker and Customer relationship, their mutual rights and duties- lien – Power to combine different accounts- Secrecy of account, Different types of accounts, Cheques, requisite of valid cheque, crossing of cheques, Meaning and types of Endorsement.	4 <sup>th</sup> Week of August to 2 <sup>nd</sup> Week of September	1 <sup>st</sup> assignment in the first week of September
<b>3</b>	Types of securities and precautions taken for banker's advances and loans, Guarantees, Pledge, Lien, Mortgage, Charge- subject matters of collateral security, Factoring, Bill Discounting, Bank Guarantee, Letter of Credit, Commercial papers.	3 <sup>rd</sup> Week of September to 1 <sup>st</sup> Week of October	-Minor test 1 in the third week of September  -2 <sup>nd</sup> assignment in the first week of October
<b>4</b>	Contemporary and Emerging issues in Banking- Problem of NPAs, Capital adequacy norms, Banking Ombudsman Scheme, Technology driven developments, Ethics and Corporate Governance in Banks.	2 <sup>nd</sup> Week of October to 1 <sup>st</sup>  Week of November	-Minor test 2 in the second week of October  -Quiz in fourth week of October

**Govt. College Hansi**

**Lesson Plan**

Unit wise lesson plan for the Odd Semester, 2023-24

Teacher: **Vijay Kumar Yadav**

Class: **M. Com 1<sup>st</sup> Year**

Subject: **Business Environment (MC 102)**

Section: **NA**

<b>Sr. No.</b>	<b>Description of Chapters/Topics</b>	<b>Expected Duration</b>	<b>Assignment/Te st</b>
<b>1</b>	Indicators of Internal and External Business environment, Environmental scanning and risk assessment, Concepts of economics systems, New Industrial policy- 1991 and Recent financial and economic reforms, Recent Monetary and Fiscal policy and their impact on Business Environment.	4 <sup>th</sup> Week of August to 2 <sup>nd</sup> Week of September	
<b>2</b>	Impact of Political, Economic, Social and Technological Environment on Emerging sectors of Indian economy, Public sector, Private sector, Services sector and SME sector, Privatisation in India, Public Private partnership, Challenges and opportunities in the rural sector.	3 <sup>rd</sup> Week of September to 1 <sup>st</sup> Week of October	-1 <sup>st</sup> assignment in the third week of September  -Quiz 1 in fourth week of September
<b>3</b>	Globalisation Business environment, Opportunities and challenges for MNC's in India, Foreign investment in India, Indian foreign trade and its impact on Balance of payment, Exchange rate movements and India's competitiveness in the world economy, world trade trends and economic integration. Contemporary issues: Climate change, Food security, Geopolitics sustainable development and de-globalisation.	2 <sup>nd</sup> Week of October to 4 <sup>th</sup> Week of October	-Minor test 1 in the second week of October  -2 <sup>nd</sup> assignment in the Third week of October
<b>4</b>	Legislations for Social responsibilities- Consumer protection act, 1986 and its amendments, Competition act, 2002 and its amendments and Environment protection act, 1986, Foreign Exchange Management act,	1 <sup>st</sup> Week of November to 4 <sup>th</sup>	-Minor test 2 in the second week of November

	1999 (FEMA) and their influences on the business environment.	Week of November	-Quiz 2 in third week of November  -Viva- voice in fourth week of November
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***VIJAY KUMAR YADAV***

(Asst. Professor of Commerce)

**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the odd Semester- 2023-24**

**Teacher: Shilka**

**Class: B.com final**

**Section: --- B**

**Subject: Business Ethics**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Te st</b>
<b>Unit 1</b>	Business ethics, nature and growing significance in business, ethical principles in business and management, theories of business ethics, ethical issues in business	From first week of August to second week of August	.
<b>Unit 2</b>	Ethics in various functional areas of business, ethics in finance, ethics in HRM, ethics in marketing, ethics in production and operation management, ethics in global business, ethics in IT	From 3Rd week of August to 2nd week September	1 <sup>st</sup> Minor test in the first week of September and assignment 2nd week of September
<b>Unit 3</b>	Ethical decision making, ethical dilemmas whistle blowing, social responsibility of business, and corporate governance corporate social responsibility under company act 2013	From 3Rd week of September to 2nd week of October	2 <sup>nd</sup> assignment in the second week of October
<b>Unit 4</b>	Intellectual property right, patent,copy rights,trademarks and business ethics, ethical value system	From 3Rd week of October to 2nd week  November	2 <sup>nd</sup> test in the second week of November
<b>Revision</b>	Revision, presentation, problem solving	From 3Rd week of November onward	.....

**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the odd Semester, 2023-24**

**Teacher: Mr.Shiv Rattan Mittal & Mrs.Shilka**  
**Subject: Principles of B.Mgt**

**Class: B.COM 1<sup>st</sup>**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Te st</b>
<b>Unit 1</b>	Business: Nature and scope of Business; Forms of Business, Management: Definition, characteristics, scope and importance of management; Functional areas of management; Management and Administration; Levels of Management; Mintzberg's Managerial Roles.	From 6 <sup>th</sup> August to 15 <sup>th</sup> October.	1 <sup>st</sup> assignment in the 1 <sup>st</sup> week of October.
<b>Unit 3</b>	Planning: Definition, Nature, Objectives and importance, Planning Process, Types of Plans, Barriers to Effective Planning. Organizing: Definition, Nature, Principles of Organisation, Types of Organisation, Organizational Structure, Authority, Delegation and Centralization vs. Decentralization	From 6 <sup>th</sup> August to 15 <sup>th</sup> October.	2nd assignment in the 1 <sup>st</sup> week of October.
<b>Unit 2</b>	Approaches to Management: Classical and Neo classical approach, Behavioural approach, Management science approach, Systems approach and Contingency approach- Highlighting the contributions of Henry Fayol, F.W. Taylor and Peter F. Drucker; Contemporary developments in approaches; Theory Z, McKinsey -7's, Quality Management.	From 16 <sup>th</sup> October to 10 <sup>th</sup> December.	1 <sup>st</sup> Minor test in 3rd Week of November.
<b>Unit 4</b>	Staffing: Meaning, importance and scope, Matching job and people. Motivation: concept, objectives & significance. Leadership: concept, significance & functions, Leadership styles,	From 16 <sup>th</sup> October to 10 <sup>th</sup> December.	2nd Minor test in 3rd Week of November.

	approaches to leadership. Controlling: meaning and characteristics of control, process of control, prerequisites of an effective control system; controlling techniques.		
<b>Revision</b>	Revision, presentation, problem solving	From 10th December & Onwards	.....



**Govt. College Hansi**

**Lesson Plan**

Unit wise lesson plan for the Even Semester, 2023-2024

Teacher: **Shilka**

Class: **M.Com 1st 1st Sem**

Subject: **Managerial Economics**

<b>Sr. No.</b>	<b>Description of Chapters/Topics</b>	<b>Expected Duration</b>	<b>Assignment/Te st</b>
<b>1</b>	<b>Theory of demand&amp;Consumer Equilibrium.Utility and Indifference curve approach.Demand Function ,Elasticity of Demand and its significance in Managerial decision making, Demand Forecasting and its Techniques.</b>	1stweek of August to 4th Week of August	1 <sup>st</sup> assignment in the last week of August
<b>2</b>	<b>Theory of Cost, Types of Cost,Production Cost, Selling Cost, R&amp;D cost, Short-Run and Long run cost curves, Relation between Cost and Revenue,BreakEven Point,Economies and diseconomies of scale and scope, Production Function,Law of Variable Proportion and return to scale,ISO quant Curves.</b>	1 <sup>st</sup> Week of September to Last Week of September.	Minor test in the Second week of September.
<b>3</b>	<b>Market Structure and Competition:Price &amp; Outputs Determination under Perfect competition, Monopoly,Monopolistic Competition and Oligopoly.Modern Theories of Firm: Bamoul's Theory of Sales Maximization .</b>	2 <sup>nd</sup> Week of October to last Week of October	2 <sup>nd</sup> assignment in the last week of October
<b>4</b>	<b>Managerial Theory,Behavioural Theory ; National income: Concept and Measurement. And Revision.....</b>	Month of November 2023	Minor test in the second week of November.

**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the Odd Semester 2023-24**

**Teacher: Mrs. Shilka**

**Class: B.COM III**

**Section: B**

**Subject: Income Tax-I**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Te st</b>
<b>Unit 1</b>	Introduction to income tax: concept, tax, person, income, agricultural income, casual income, previous year, financial year, assessment year, gross total income, total income, tax management, tax evasion, avoidance and tax planning.	From 6 <sup>th</sup> August to 15 <sup>th</sup> September	1 <sup>st</sup> assignment in the 2 <sup>nd</sup> week of September.
<b>Unit 2</b>	Basis of charges, scope of total income, residence and tax liability, income which does not form part of total income.  Heads of income: Income from salary.	From 16 <sup>th</sup> September to 15 <sup>th</sup> October.	2 <sup>nd</sup> assignment in the 2 <sup>nd</sup> week of October.
<b>Unit 3</b>	Heads of income: House property; Profits and gains from business and profession.	From 16 <sup>th</sup> October to 15 <sup>th</sup> November.	Minor test in the 2 <sup>nd</sup> week of November.
<b>Unit 4</b>	Capital gains; Income from other sources; Clubbing and aggregation of income; Provisions regarding set off and carry forward of losses.	From 16 <sup>th</sup> November to 30 <sup>th</sup> November.	.....
<b>Revision</b>	Revision, presentation, problem solving	From December onwards.	.....

Government College,Hansi.....Unit wise Lesson Plan for the Odd Semester,2023-24

**Name of the Teacher**

**Mr. SHIV RATTAN MITTAL**

**Class-** B.Com 1<sup>st</sup> Sem.

**Subject-**Principles of Business Management

<b>Unit</b>	<b>Description of Chapters/Topics</b>	<b>Duration</b>	<b>Assignment/Test</b>
Unit 1	Business : Nature, Scope & Forums, Mgt. : Levels of Mgt.	24 <sup>th</sup> July,2023 - 15 <sup>th</sup> Aug.,2023	1 <sup>st</sup> Assignment in the 2nd Week of August
Unit 2	Approaches to Mgt. : Classical, Neo-Classical, Behavioural, System & Contingency Approach, Contribution of F.W.Taylor, Henry Fayol, & Peter F. Durcker.	16 <sup>th</sup> Aug. – 31 <sup>st</sup> Aug.,2023	1 <sup>st</sup> Minor Test in the Last week of August
Unit 3	Planning, Organising, Delegation of Authority & Centralization v/s Decentralization.	1 <sup>st</sup> Sept. – 30 <sup>th</sup> Sept.,2023	2 <sup>nd</sup> Assignment in the Last Week of September
Unit 4	Staffing, Motivation, Leadership & Controlling	1 <sup>st</sup> Oct. – 9 <sup>th</sup> Nov.,2023	2 <sup>nd</sup> Minor Test in the Last Week of October.
Revision	Revision, Problem Solving & Quizzes	17 <sup>th</sup> Nov. – 14 <sup>th</sup> Dec.,2023	

## Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester

2023-24

Department:- Commerce

Name of the Teacher:- Mr. SHIV RATTAN

Class:- B.Com 5<sup>th</sup> Sem.

Subject- Financial Mgt.

Paper- BCOM-502

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	<b>Financial Mgt. :</b> Goals, Functions & Decisions, Time Value of Money.	1 <sup>st</sup> Aug.-31 <sup>st</sup> Aug.	1 <sup>st</sup> Assignment in the 3 <sup>rd</sup> Week of August
Unit 2	<b>Capital Budgeting Decisions :</b> Introduction, Nature & Types of Investment Decisions & Methods, <b>Measure of Operating &amp; Financial Leverage.</b>	1 <sup>st</sup> Sept. – 30 <sup>th</sup> Sept.	2 <sup>nd</sup> Assignment in the Last Week of September
Unit 3	<b>Mgt. of Working Capital:</b> Meaning, Determinants, <b>Cost of Capital, Cash Mgt., Receivable Mgt., Inventory Mgt.</b>	1 <sup>st</sup> Oct. – 15 <sup>th</sup> Oct.	1 <sup>st</sup> Minor Test in the 2 <sup>nd</sup> Week of October
Unit 4	<b>Capital Structure :</b> Theories & its determinants, <b>Dividend Policy Models.</b>	16 <sup>th</sup> Oct. – 31 <sup>st</sup> Oct.	2 <sup>nd</sup> Minor Test in the Last Week of October
Revision	<b>Revision, Problem Solving &amp; Quizzes</b>	1 <sup>st</sup> Nov. Onwards	.....

**Government College, Hansi**

**Unit wise Lesson Plan for Odd Semester**

**2023-24**

**Department:- COMMERCE**

**Name of the Teacher:- Mr. SHIV RATTAN**

**Class:- M.Com 1<sup>st</sup> Sem.**

**Subject:- Financial A/c & Reporting**

**Paper:- MC-104**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	<b>Introduction to Accounting:</b> Meaning, nature & scope, branches of accounting; GAAP: Demand & supply of financial statement information: Parties demanding financial statement information. Conflicts among parties, factors affecting demand for financial statement information.	16 <sup>th</sup> Aug. – 31 <sup>st</sup> Aug.	1 <sup>st</sup> Assignment in the Last Week of August.
Unit 2	<b>Accounting Cycle:</b> Business transactions & source documents. Analyzing transaction, Journalizing & posting transactions, preparing a trial balance, adjusted trial balance & preparation of financial statements of trading concerns.	1 <sup>st</sup> Sept. -30 <sup>th</sup> Sept.	1 <sup>ST</sup> Minor Test in the Last Week of Sept.
Unit 3	<b>The conceptual framework of financial Statements:</b> Purpose of the framework, scope & coverage. Qualitative characteristics of financial statements, Concept of capital & capital maintenance. Performa financial statements of corporate entities. Significance of notes to financial statements & accounting policies. Other financial reports: Auditor's report, Directors report & corporate governance report.	1 <sup>st</sup> Oct. – 31 <sup>st</sup> Oct.	2 <sup>ND</sup> Minor Test in the 3rd Week of Oct.
Unit 4	<b>Quality of earnings:</b> Window dressing, Creative financial practices, impact of extraordinary items. Quality of disclosure in reported earnings. Financial Distress:	1 <sup>st</sup> Nov. – 30 <sup>th</sup> Nov.	2 <sup>nd</sup> Assignment in the 3rd Week of Nov.

	Meaning, indicators, models of distress prediction.		
Revision	Revision, Problem Solving & Quizzes	1st Dec. Onwards	.....

**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the odd Semester- 2023-24**

**Teacher: Sunita**

**Class: B.com final**

**Section: --- A**

**Subject: Business ethics**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Test</b>
<b>Unit 1</b>	Business ethics, nature and growing significance in business, ethical principles in business and management, theories of business ethics, ethical issues in business	From first week of August to second week of August	.
<b>Unit 2</b>	Ethics in various functional areas of business, ethics in finance, ethics in HRM, ethics in marketing, ethics in production and operation management, ethics in global business, ethics in IT	From 3Rd week of August to 2nd week September	1 <sup>st</sup> Minor test in the first week of September and assignment 2nd week of September
<b>Unit 3</b>	Ethical decision making, ethical dilemmas whistle blowing, social responsibility of business, and corporate governance corporate social responsibility under company act 2013	From 3Rd week of September to 2nd week of October	2 <sup>nd</sup> assignment in the second week of October
<b>Unit 4</b>	Intellectual property right, patent,copy rights,trademarks and business ethics, ethical value system	From 3Rd week of October to 2nd week November	2 <sup>nd</sup> test in the second week of November
<b>Revision</b>	Revision, presentation, problem solving	From 3Rd week of November onward	.....

**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the odd Semester- 2023-24**

**Teacher: Sunita**

**Class: B.com final**

**Section: --- A and B  
Management**

**Subject: Human resource**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Test</b>
<b>Unit 1</b>	HRM meaning, concept, importance evolution of HRM, function, role and responsibilities of H.R manager, emerging challenges of HRM	From first week of August to second week of August	.
<b>Unit 2</b>	Human resource planning, objective, importance of HRP, job analysis, process of job analysis, recruitment and selection, orientation and socialisation, human resource retention strategies, HR outsourcing: opportunity in India	From 3Rd week of August to 2nd week September	1 <sup>st</sup> Minor test in the first week of September and assignment 2nd week of September
<b>Unit 3</b>	Human resource training and development , methods of training , difference between training and development , potential and performance appraisal, process, need and importance, career planning and development	From 3Rd week of September to 2nd week of October	2 <sup>nd</sup> assignment in the second week of October
<b>Unit 4</b>	Compensation mgt. for HR, concept of wages and salaries , development of a sound compensation system, types of wages and salaries, group incentive plans, meaning and categories, employee safety, health and welfare	From 3Rd week of October to 2nd week November	2 <sup>nd</sup> test in the second week of November
<b>Revision</b>	Revision, presentation, problem solving	From 3Rd week of November onward	.....



**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the odd Semester- 2023-24**

**Teacher: Sunita**

**Class: B.com final**

**Section: --- B**

**Subject: Management Accounting**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Test</b>
<b>Unit 1</b>	Management accounting: meaning scope importance, distinction between financial accounting and management accounting, distinction between management accounting and cost accounting	From first week of August to second week of August	.
<b>Unit 2</b>	Concept of budgeting and budgetary control, objectives and advantage of budgetary control, types of budgets and their preparation, essentials of a budgetary control system, performance budgeting and zero base budgeting	From 3Rd week of August to 2nd week September	1 <sup>st</sup> Minor test in the first week of September and assignment 2nd week of September
<b>Unit 3</b>	Marginal costing: meaning ,nature, uses and limitations, break even analysis and PV ratio, Margin of safety, Angel of incidence decision involving alternative choices	From 3Rd week of September to 2nd week of October	2 <sup>nd</sup> assignment in the second week of October
<b>Unit 4</b>	Financial analysis meaning and importance: Ratio analysis meaning importance, limitations and calculations of ratios, cash flow statement : meaning, uses and its preparation	From 3Rd week of October to 2nd week November	2 <sup>nd</sup> test in the second week of November
<b>Revision</b>	Revision, presentation, problem solving	From 3Rd week of November onward	.....

**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the odd Semester, 2023-24.**

**Teacher: Surender Kumar**

**Class: M.com (P)**

**Section: ---**

**Subject: CB**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Te st</b>
<b>Unit 1</b>	Introduction to Consumer Behaviour. Its roots in various Disciplines. Interrelationship between consumer behaviour & marketing strategy. Market Research, process, research methods & tools types & its relevance	From 1 <sup>st</sup> week of August to 3 <sup>rd</sup> week of August	Group Discussion
<b>Unit 2</b>	Consumer as an individual- consumer needs & motivation, goals, dynamics of motivation, measurement of motives. Personality & consumer behaviour, nature, theories of personality & self concept, Consumer perception & information processing, dynamics of perception, consumer imagery & perceived risk, learning & consumer involvement, behavioural & cognitive learning theories & application to marketing, consumer attitude meaning, attitude formation & change, relationship between behaviour & attitude formation & structural models	From last week of August to 1 <sup>st</sup> week of October	1 <sup>st</sup> Minor test & 1 <sup>st</sup> Assignment in the third week September
<b>Unit 3</b>	Group Dynamics & consumer Behaviour- Reference group meaning, types and affect, relevance and application. The family function decision making & family life cycle. Social class- meaning, types of status, lifestyle & mobility in social classes. Influence of culture, characteristics, measurement & core values of culture, sub culture aspects on consumer mind set, meaning, types & understanding of multiple sub cultural membership interaction & influence	From 2 <sup>nd</sup> week of October to 1 <sup>st</sup> week of November	2 <sup>nd</sup> assignment & 2 <sup>nd</sup> test in the First week of November

<b>Unit 4</b>	Group decision making process- personal influence & opinion leadership, meaning & dynamics of opinion leadership process, measurement of opinion leadership, diffusion of leadership, process of diffusion & adoption, profile of consumer innovator. Consumer decision making, levels of decision making, CB Model of current trends ethical issues in CB ,	2 <sup>nd</sup> week of November to last week of November	Case studies & Presentation
<b>Revision</b>	Revision, presentation, problem solving	From 1 <sup>st</sup> Dec	.....

**Govt. College Hansi**

**Lesson plan- Unit wise lesson plan for the odd Semester, 2023-24.**

**Teacher: Surender Kumar**  
**Subject: Financial Accounting**

**Class: B.COM 1<sup>st</sup> Section:**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Test</b>
<b>Unit 1</b>	Financial accounting: meaning, need, objectives & scope; book-keeping and accounting; branches of accounting; GAAP & FASB accounting principles: concepts and conventions; and accounting equation; journal; rules of journalizing;	From 1 <sup>st</sup> week of August to 31 <sup>st</sup> August	1 <sup>st</sup> assignment in the last week of August
<b>Unit 2</b>	Accounting cycle: Classification of accounts, Journal, Rules of debit and credit, Compound journal entry, Ledger, Rules regarding posting, Trial balance, Sub-division of journal.	From 1 <sup>st</sup> week of September to 30 <sup>th</sup> September.	Minor 1 <sup>st</sup> test in the 2 <sup>nd</sup> week of September.
<b>Unit 3</b>	Capital and Revenue: Classification of income, expenditure and receipts, deferred revenue expenditure, Provisions and Reserves: Kinds of provisions and reserves, Difference between provision and reserve. Depreciation Accounting: Concept, causes of depreciation, Need for providing depreciation, factors determining the amount of depreciation, methods of charging and recording depreciation.	From 1 October to 30 <sup>th</sup> October.	2 <sup>nd</sup> assignment in the 3 <sup>rd</sup> week of October.
<b>Unit 4</b>	Accounting for not-for profit organizations: Receipt and Payment Account, Income and Expenditure Account, Receipt and Payment Account versus Income and Expenditure Account Financial statements of profit-making entities: Manufacturing Account, Trading Account, Profit and Loss Account, Balance Sheet, Difference between Profit and Loss Account and Balance Sheet, Adjustments in final accounts.	From 1 <sup>st</sup> November to 30 <sup>th</sup> November	2 <sup>nd</sup> Minor test in the 1 <sup>st</sup> week November.
<b>Revision</b>	Revision, presentation, problem solving	From 1 <sup>st</sup> December & Onwards	.....

**Govt. College Hansi**

**Lesson plan**

**Unit wise lesson plan for the odd Semester, 2023-24.**

**Teacher: Surender Kumar**

**Class: M.com (P)**

**Section: ---**

**Subject: MP &OB**

<b>Unit</b>	<b>Description of chapters/topics</b>	<b>Duration</b>	<b>Assignment/Te st</b>
<b>Unit 1</b>	Meaning, Nature and scope of management, Management thoughts, Approaches to management, Scientific process, and Decision theory school, and Quantitative and system school, contingency theory of management, Managerial skills, and Social responsibility of managers.	From 3 <sup>rd</sup> week of August to 2 <sup>nd</sup> week of September.	Group Discussion
<b>Unit 2</b>	Managerial function: Planning-concepts, significance, types, Organizing-concepts principles, types of organization, authority and responsibility, power, delegation. Decentralization, Staffing, directing (Leading ,motivating and communicating) Coordinating, controlling process and techniques	From 3 <sup>rd</sup> week of September to 1 <sup>st</sup> week of October	1 <sup>st</sup> Minor test & 1 <sup>st</sup> Assignment in the 1st week of October.
<b>Unit 3</b>	Organizational Behaviour: Concepts, determinants, challenges and opportunity of OB, contributing disciplines to the OB, Organization culture and climate, Factors affecting of OB, understanding and managing individual behaviour, Personality, Perception, Values, Attitudes and Learning.	From 2 <sup>nd</sup> week October to 1 <sup>st</sup> week of November	2 <sup>nd</sup> assignment & 2 <sup>nd</sup> test in the First week of November
<b>Unit 4</b>	Understanding and managing group behaviour, Interpersonal and group dynamics, Transactional analysis, Application of emotional intelligence in organization, Communication process, models of communication, issues in organizational communication, Organization change, to analyze the major concepts of organizational behaviour in business	From 2 <sup>nd</sup> week of November to last week of November.	

	organizational development, Conflicts management and stress management ,		Presentation & Case studies
<b>Revision</b>	Revision, presentation, problems solution	From 1 <sup>st</sup> Dec & Onwards	.....

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Even Semester 2023-24**

**Department: COMMERCE**

Name of Teacher: Dr.Sushila

Class: BCOM 3rd sem

Subject: BUSINESS STATISTICS -1

Paper: BC 205

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	1) Introduction of statistics : Development 2) Definition 3) Scope and Limitations 4) Collection of data methods 5) Methods of collecting primary data 6) Classification – Functions 7) Rules and bases of classification 8) Frequency distributions and its types 9) Tabulation- meaning , types , parts of requisites of good table 10) Presentation through diagrams –general rules 11) Types and choice of diagram 12) Graphic presentations –general rules for graphing 13) Graphs of frequency distributions and histograms	24 July 2023 to 16 Aug.2023	1 <sup>st</sup> assignment in the 2 <sup>nd</sup> Week of August
<b>Unit-2</b>	14) Concept and measures of central tendency: Mathematical averages 15) Positional average and partition values 16) Measures of dispersion in detail: Absolute and relative measures of dispersion – Range 17) Quartile deviation 18) Mean deviation 19) Standard deviation 20) Variance	17 Aug. 2023 to 10 Sep. 2023	Minor Test in the 1 <sup>st</sup> Week of September

<b>Unit-3</b>	21) Moments and Measures of Skewness – Karl Persons's 22) Bowley's and Kelly's coefficient of skewness 23) Coefficient of skewness based on moments 24) Moments about mean 25) Sheppard correction for grouping errors in moments 26) Kurtosis	11 Sep. 2023 to 5 Oct. 2023	2 <sup>nd</sup> Assignment in the Last Week of September
<b>Unit-4</b>	27) Correlation – Types 28) Methods – Scatter diagram method 29) Karl Pearson's coefficient of correlation 30) Standard error of estimate 31) Co-efficient of determination 32) Regression – Linear and non linear 33) Lines of regression 34) Coefficients of regression 35) Correlation vs. regression analysis	6 October 2023 to 7 Nov. 2023	



Revision		17 November 2023 to till exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Even Semester 2023-24**

**Department: COMMERCE**

Name of Teacher: Dr. Sushila

Subject: Leadership Dynamics

Class: M.Com 3rd sem

Paper: M CH 334

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	1) Leadership Dynamics: Concept 2) Leadership and Management 3) Leadership and Power 4) Successfully Leadership versus Effective Leadership	24 July 2023 to 16 Aug 2023	1 <sup>st</sup> Assignment in the 2 <sup>nd</sup> week of August
<b>Unit-2</b>	5) Leadership Approaches: Trait Approach 6) Skills Approach 7) Behavioral Approach 8) Situational Approach 9) Contingency Approach 10) Path Goal Approach	17 Aug 2023 to 10 Sep 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	11) Leadership Styles: Autocratic 12) Democratic 13) Participative 14) Supportive 15) Free - rein : Comparative Analysis of Leadership Styles 16) Building Effective Leadership Styles 17) Leadership Styles of Famous Personalities in general perspective and in managerial perspective	11 Sep 2023 to 5 Oct 2023	2 <sup>nd</sup> Assignment in Last Week of September

<b>Unit-4</b>	18) Contemporary Issues in Leadership: Charismatic Leadership 19) Women Leadership 20) Multicultural Leadership 21) Team Leadership 22) Ethics in Leadership 23) Servant Leadership 24) Transactional and Transformational leadership.	6 October 2023 to 7 Nov 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Even Semester 2023-24**

**Department: Commerce**

Name of Teacher: Dr. Sushila

Class: M.Com 1st sem

Subject: Business Statistics

Paper:

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	1) Univariate analysis: central tendency 2) Dispersion(theoretical concept):Probability: Introduction 3) Addition Theorem 4) Multiplication Theorem 5) Conditional Probabilty 6) Bayes Theorem 7) Theoretical probability distributions: Binomial , Poission 8) Normal Distribution: their characteristics and applications	16 Aug.2023	1 <sup>st</sup> assignment in the 2 <sup>nd</sup> week of August
<b>Unit-2</b>	9) Sampling: Probability and non probability sampling methods: Sampling distribution and its characteristics: Hypothesis testing : hypothesis formulations 10) Testing: Statistical Tests: z-test 11) t-test 12) f-test 13) Analysis of variance 14) Chi-square test 15) Wilcoxon Signed-Rank test 16) Kruskal-Wallis test	17Aug.2023 to 10 Sep.2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	17) Correlation analysis: simple 18) Partial and multiple correlations: Regression analysis: simple linear regression model 19) Ordinary least square method	11 Sep. 2023 to 5 Oct.2023	2 <sup>nd</sup> Assignment in the Last Week of September

	20) Time series analysis: components of a time series and their measurements and uses		
<b>Unit-4</b>	21) Index numbers: meaning and types 22) Methods for measuring indices 23) Adequacy of indices: Statistical quality control: causes of variation in quality 24) Control Charts 25) Acceptance sampling.	6 Oct. 2023 to 7 Nov. 2023	Minor test
<b>Revision</b>		17 November 2023 to till exam	

**CLASS:B.Com.-II Year ( III Sem)(2023-24) NAME OF PAPER –Business Laws**

**PAPER CODE – BCOM 303**

**Teacher name- Mr.Vijay Kaliraman**

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b>	Indian Contract Act: Meaning and essentials of a valid contract; offer and acceptance; consideration; capacity to contract; consent and free consent;
		<b>2<sup>nd</sup> week</b>	consideration;; performance of contracts; different mode of discharge of contract
		<b>3<sup>rd</sup> week</b>	void agreements; quasi contracts
		<b>4<sup>th</sup> week</b>	Remedies for breach of contract and Assignment I
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b>	Contracts of Indemnity
		<b>2<sup>nd</sup> week</b>	Contracts of Indemnity and Guarantee;
			bailment and pledge
		<b>3<sup>rd</sup> week</b>	contract of agency. Unit test
		<b>4<sup>th</sup> week</b>	
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b>	Sale of Goods Act– Definition and essential of a contract of sale
		<b>2<sup>nd</sup> week</b>	Conditions and warranties, transfer of property
			Performance of contract of sale; right of unpaid seller;
		<b>4<sup>th</sup> week</b>	Remedies for breach of contract Assignment II
<b>4.</b>	<b>November</b>	<b>1<sup>st</sup> week</b>	Negotiable Instrument Act – Meaning and essential elements of a negotiable instruments; types of negotiable instrument; holder and holder in due course; negotiation of negotiable instruments; dishonor of negotiable instruments.
		<b>2<sup>nd</sup> week</b>	
		<b>3<sup>rd</sup> week</b>	Meaning and scope of Information Technology Act; digital signature; electronic governance; regulation of certifying authority; digital signature certificates;
		<b>4<sup>th</sup> week</b>	

			duties of subscribers; penalties adjudication and offences.
			Revision
			Revision

CLASS:M.Com.-II Year ( III Sem)(2023-24) NAME OF PAPER –\_Business  
Legislation

PAPER CODE – MC302

Teacher name- Mr.Vijay Kaliraman

SR. NO.	MONTHS	PERIOD	TOPICS
1.	August	1 <sup>st</sup> week	Indian Contract Act: Meaning and essentials of a valid contract; offer and acceptance; consideration; capacity to contract; consent and free consent;
		2 <sup>nd</sup> week	consideration;; performance of contracts; different mode of discharge of contract
		3 <sup>rd</sup> week	void agreements; quasi contracts
		4 <sup>th</sup> week	Remedies for breach of contract and Assignment I
2.	September	1 <sup>st</sup> week	Sale of Goods Act– Definition and essential of a contract of sale
		2 <sup>nd</sup> week	Conditions and warranties, transfer of property
		3 <sup>rd</sup> week	Performance of contract of sale; right of unpaid seller;
		4 <sup>th</sup> week	Remedies for breach of contract Assignment II
3.	October	1 <sup>st</sup> week	The Companies Act, 2013; Meaning and Characteristics of a Company; Objects and Applications of Companies Act, 2013; Landmark provisions of new Companies Act, 2013; Classification of companies, Concept of One Person Company
		2 <sup>nd</sup> week	
		3 <sup>rd</sup> week	Formation of a company, Memorandum and Articles of association and unit test
		4 <sup>th</sup> week	Prospectus, Allotment of shares and share capital, Membership in companies
			Meetings of Companies: General principles of meetings, Types of meetings; Prevention of Oppression and Mismanagement; Winding up of a Company
4.	November	1 <sup>st</sup> week	Consumer Protection Act: Define consumer rights, provisions regarding complaints in consumer courts, Unfair Trade Practices and Restrictive Trade Practices, Consumer



		<b>2<sup>nd</sup> week</b>	Protection Council, Consumer foru
			Negotiable Instrument Act – Meaning and essential elements of a negotiable instruments; types of negotiable instrument; holder and holder in due course; negotiation of negotiable instruments; dishonor of negotiable instrument
		<b>3<sup>rd</sup> week</b>	Revision
		<b>4<sup>th</sup> week</b>	
			Revision

CLASS:B.Com.-III Year ( III Sem)(2023-24) NAME OF  
PAPER – **Banking Law and Practice**

PAPER CODE – BCOM 503

Teacher name- Mr.Vijay Kaliraman

SR. NO.	MONTHS	PERIOD	TOPICS
1.	August	1 <sup>st</sup> week	Origin and Evolution of banks - Meaning and definition of banking
		2 <sup>nd</sup> week	Structure of Indian Banking System - Classifications of banks; Functions of commercial banks;
		3 <sup>rd</sup> week	Regulatory Framework and Compliances - Banking Regulation Act 1949.
		4 <sup>th</sup> week	Prevention of Money Laundering Act, 2002. And Assignment I
2.	September	1 <sup>st</sup> week	Banker and Customer relationship; their mutual rights and duties - lien - Power to combine different accounts.
		2 <sup>nd</sup> week	Secrecy of account; Different Types of Accounts; Cheques requisite of valid cheque.
		3 <sup>rd</sup> week	Crossing of cheques; Meaning and types of Endorsement. Unit Test
		4 <sup>th</sup> week	Types of securities and precautions taken for banker's
3.	October	1 <sup>st</sup> week	advances and loans Guarantees, pledge, lien, mortgage, charge - subject matters of collateral security
		2 <sup>nd</sup> week	Factoring; Bill Discounting and Assignment II
		3 <sup>rd</sup> week	Bank Guarantees; Letters of Credit
		4 <sup>th</sup> week	Contemporary and Emerging issues in Banking- Problem of NPAs
4.	November	1 <sup>st</sup> week	Capital adequacy norms; Banking Ombudsman Scheme; Technology driven developments;
		2 <sup>nd</sup> week	Ethics and Corporate Governance in Banks.

		3 <sup>rd</sup> week	Revision
		4 <sup>th</sup> week	Revision

CLASS:B.Com.-III Year ( III Sem)(2023-24) NAME OF PAPER – Indian  
Financial System

PAPER CODE – BCOM 305

Teacher name- Mr.Vijay Kaliraman

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b>	Introduction: nature and role of financial system;
		<b>2<sup>nd</sup> week</b>	Financial system and economic development; An overview of Indian financial system.
		<b>3<sup>rd</sup> week</b>	Components of financial system: Financial markets and financial instruments:
		<b>4<sup>th</sup> week</b>	money and capital markets: Money market: meaning, constituents instruments and functions
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b>	Capital market: primary and secondary market; Depository system and assignment I
		<b>2<sup>nd</sup> week</b>	Recent developments in Indian capital market; SEBI: its formation, role and recent developments. The Debt Market: meaning, features, participants, instrument
		<b>3<sup>rd</sup> week</b>	Private, PSUs & Government securities market. Financial institutions: Reserve Bank of India:
		<b>4<sup>th</sup> week</b>	Reserve Bank of India: organization, management and functions; credit creation and credit control
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b>	Commercial banks: meaning and functions, structure and recent developments in commercial banking in India;
		<b>2<sup>nd</sup> week</b>	E-banking, NPA's in Commercial Banks,
		<b>3<sup>rd</sup> week</b>	Payment Banks and Unit test
		<b>4<sup>th</sup> week</b>	Development banks and assignment II
<b>4.</b>	<b>November</b>	<b>1<sup>st</sup> week</b>	Concept, objectives and functions.
		<b>2<sup>nd</sup> week</b>	recent developments in development banking
			Revision

		<b>3<sup>rd</sup> week</b>	Revision
		<b>4<sup>th</sup> week</b>	

**Lesson Plan 2023-24**  
**Government College, Hansi**

**Unit wise Lesson Plan for ODD Semester Aug.-Dec.-2023**

**Department: Computer Science**

Name of Teacher: **Dr. Banta Singh Jangra**

Class: **PGDCA (1<sup>st</sup> Sem.)**

Subject: **Introduction to Information Technology**

Paper: **PGDCA-101**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	<b>Computer Fundamentals:</b> Introduction to Computers: Characteristics and Limitations of Computers, Evolutions of Computers, Classification of Computers, Computer Languages, Types of software, Structured Programming Concepts.  <b>Basic Computer Organization:</b> Units of a computer, CPU, ALU, Memory Hierarchy, Registers, I/O devices, Mother Board.	16-Aug-23 To 15-Sept.-23	Assignment-1
Unit-2	<b>Word Processing:</b> Introduction to MS-Word, Creating & Editing Text: Paragraph Formatting, Page Formatting, Template, Page, Views, Table; Advanced Features: Bookmark, Mail Merge, Macros.	16-Sept-23 To 15-Oct-23	Test-1
Unit-3	<b>Spread Sheets:</b> Introduction to MS-Excel, Creating & Editing Worksheet, and Formatting data, Formulas and Functions, Creating Charts, Pivot Tables.  <b>Power Point Presentations:</b> Creating, Manipulating & Enhancing Slides, Organizational Charts, Animations & Sounds, Inserting Animated Pictures	16-Oct-23 To 15-Nov-23	Assignment-2
Unit-4	<b>Internet Basics:</b> History of Internet, Web Browsers, Web Servers, Hypertext Transfer Protocol, Internet Protocols Addressing, Internet Connection Types, How Internet Works, ISPs, Search Engines, Emails and Its Working, Internet Security, Uses of Internet, Computer Networks and their advantages, Types of Computer Network, Network Topologies, Basics of Transmission Media; Cloud Computing Basics: Overview,	11-Nov-23 To 10-Dec-23	Mock Test

	Applications, Intranets and the Cloud; Benefits, Limitations and Security Concerns.		
<b>Revision</b>	Revision of Syllabus and Students Query Handling with Sample Papers	11-Dec-23 To Exam Date	

**Lesson Plan 2023-24**  
**Government College, Hansi**

**Unit wise Lesson Plan for ODD Semester Aug.-Dec.-2023**

**Department: Computer Science**

Name of Teacher: **Dr. Banta Singh Jangra**

Class: **PGDCA (1<sup>st</sup> Sem.)**

Subject: **Data Base Management System**

Paper: **PGDCA-104**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Overview: File Systems vs. DBMS, Characteristics of the Data Base Approach, Database users, Advantages and Disadvantages of a DBMS, Responsibility of Database Administrator. Data Base Systems Concepts and Architecture: Data Models, Schemas and Instances, DBMS architecture and various views of Data, Data Independence, Database languages.	16-Aug-23 To 15-Sept.-23	Assignment-1
<b>Unit-2</b>	Entity Relationship Model: Basic Concepts-Entity, Attributes, Types of Attributes, Entity set and Keys, Relationships-Relationship set, Degree of Relationship, Roles and Structural Constraints, ER Diagrams, Reduction of an E-R Diagram to Tables, Binary Representation and Cardinality, Participation Constraints	16-Sept-23 To 15-Oct-23	Test-1
<b>Unit-3</b>	Relational Data Model:-Brief History, Relational Model Terminology-Relational Data Structure, Database Relations, Properties of Relations, Keys, Domains, Integrity Constraints over Relations, Base Tables and Views	16-Oct-23 To 15-Nov-23	Assignment-2
<b>Unit-4</b>	SQL: Introduction to SQL, Data Types in SQL, Common Commands in SQL- Select, Insert, Update and Delete, views in SQL; Relational Database Design: Functional Dependencies, Decomposition, Desirable properties of decomposition, Normal Forms (1 NF, 2 NF, 3 NF and BCNF).	11-Nov-23 To 10-Dec-23	Mock Test
<b>Revision</b>	Revision of Syllabus and Students Query Handling with Sample Papers	11-Dec-23 To Exam Date	



**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Anil Kumar

Class: BCA-II

Subject: Object Oriented Programming Using C++ Paper: BCA-PC(L)-231

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction to C++, C++ Standard Library, Basics of a Typical C++ Environment, Header Files and Namespaces, Library files. Introduction to Objects and Object-Oriented Programming, Encapsulation, Access Modifiers; Controlling access to a class, method or variable (public, private, protected, package), Other Modifiers, Polymorphism; overloading, Inheritance, Overriding Methods, Abstract classes, Reusability.	24 July to 05 Sept.	Test
<b>Unit-2</b>	Classes and Data Abstraction: Introduction, Structure Definitions, Accessing Members of Structure, Class Scope and Accessing Class Members, Initializing Class Objects, Constructor, Using Default Arguments with Constructor, Using Destructor, Classes: Const(Constant) Object and Const Member Function, Object as Member of Classes, Friend Function and Friend class, Function Overloading. Operator Overloading: Introduction, Fundamentals of Operator Overloading, Restrictions on Operator Overloading, Operator Functions as Class Members vs. as Friend Function, Overloading, <> Overloading Unary Operators, Overloading Binary Operators.	06 Sept to 30 Sept	Test
<b>Unit-3</b>	Inheritance: Introduction, Inheritance: Base Classes and Derived Classes, Protected Members, Casting Base-Class Pointers to Derived-Class Pointer, Using Member Functions, Overriding Base-class members in a Derived class, Public, Protected, and Private Inheritance, Using Constructors and Destructors in Derived Classes, Implicit Derived-Class Object to Base-Class Object Conversion.	1 Oct to 30 Oct	Assignment

<b>Unit-4</b>	<b>UNIT- IV</b> Virtual Functions and Polymorphism: Introduction to Virtual Functions, Abstract Base Classes and Concrete Classes, Polymorphism, New Classes and Dynamic Binding, Virtual Destructor, Polymorphism, Dynamic Binding. File and I/O Streams: Files and Streams, Creating a Sequential Access File, Reading Data From A Sequential Access File, Updating Sequential Access File, Random Access File, Creating A Random Access File, Writing Data Randomly to a Random Access File, Reading Data Sequential from a Random Access File.	01 Nov to 25 nov	Assignment  Test
<b>Revision</b>		25 Nov to 20 Dec revision	Test

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Anil Kumar

Class: PGDCA

Subject: Operating System

Paper: PGDCA-103

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introductory Concepts: Operating systems functions and characteristics, operating system structure, operating system services, system calls, system programs. Types of Operating system: Batch operating system, Time-sharing operating system, Distributed operating system, Real time systems Process Management: Process concept, Process States, Process Control Block, Cooperating processes.	16 August to 06 September	
<b>Unit-2</b>	Unit II CPU scheduling: Levels of Scheduling, Scheduling criteria, Comparative study of scheduling algorithms, multiple processor scheduling. Concurrent Processes: Critical section problem, Semaphores, Classical process co-ordination problems and their solutions, Monitors, Inter-process Communications.	7September to 5 October	Test
<b>Unit-3</b>	Deadlock: System model, Deadlock characterization, Methods for handling Deadlocks: Deadlock prevention, Deadlock avoidance, Deadlock detection, Recovery from Deadlock. Storage Management: Storage allocation methods: Single contiguous allocation, Multiple contiguous allocation, Paging; Segmentation combination of Paging and Segmentation, Virtual memory concepts, Demand Paging, Page replacement Algorithms, Thrashing.	6 October to 30 October	Assignment

<b>Unit-4</b>	Device and file management: Disk scheduling, Disk structure, Disk management, File Systems: Functions of the system, File access and allocation methods, Directory Systems: Structured Organizations, directory and file protection mechanisms. Case Studies: Comparative study of WINDOW, UNIX, ANDROID & LINUX system.	01 November to 30November	Assignment
<b>Revision</b>		1 December to 20 December	Test

## Lesson Plan

### Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2023**

Name of Teacher: **Dr. Anju Jain**

Class: **BCA-II (3<sup>rd</sup> Sem.)** Subject: **Digital Electronics**

Course code: **BCA-PC (L)-233**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Information Representation: Number Systems, Binary Arithmetic Operations, Fixed-point and Floating point representation of numbers, BCD Codes, Error detecting and correcting codes, Character Representation – ASCII, EBCDIC, Unicode, Binary Logic: Boolean Algebra, Boolean Theorems, Boolean Functions Truth Tables, Canonical and Standard forms of Boolean functions , Simplification of Boolean Functions - Venn Diagram, Karnaugh Maps.	24 <sup>th</sup> July to 31 <sup>st</sup> August , 2023	Assignment-1
<b>Unit-2</b>	Digital Logic: Basic Gates -AND, OR, NOT, Universal Gates - NAND, NOR, Other Gates - XOR, XNOR etc. NAND, NOR, AND-OR-INVERT and OR-AND-INVERT implementations of digital circuits, Combinational Logic – Characteristics, Design Procedures, analysis procedures, Multilevel NAND and NOR circuits.	1 <sup>st</sup> September to 15 <sup>th</sup> September, 2023	Test-1
<b>Unit-3</b>	Combinational Circuits: Half-Adder, Full-Adder, Half-Subtractor, Full-Subtractor, Encoders, Decoders, Multiplexers, Demultiplexers, Comparators, Code Converters BCD to Seven Segment Decoder.	16 <sup>th</sup> September to 15 <sup>th</sup> October, 2023	Test-2
<b>Unit-4</b>	Sequential Logic: Characteristics, Flip-Flops, Clocked RS, D type, JK, T type and Master Slave flip-flops. State table, State diagram and State equations. Flip-flop excitation tables.	16 <sup>th</sup> October to 30 <sup>th</sup> October, 2023	Mock Test

<b>Revision</b>	Revision of Syllabus and Students Query Handling	1 <sup>st</sup> November 2023 to Exam Date	Presentation
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## Lesson Plan

### Government College, Hansi

Unit wise Lesson Plan Odd Semester **July – December, 2023**

Name of Teacher: **Dr. Anju Jain**

Class: **BCA-III (5<sup>th</sup> Sem.)** Subject: **Programming Using Python**

Course code: **BCA-PC (L)-351**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction to Python: History and Features of Python Programming, Python Interpreter. Variable, identifiers and literal. Token, keywords. Data Types. Arithmetic operators, Relational operators, Logical operators, Bitwise operators, Assignment operators, Membership operators, Identity operators. Operator precedence. Comment, Indentation, Need for indentation Built-in Functions: input, eval, composition, print, type, round, min and max, pow. Type Conversion, Random Number Generation. Mathematical Functions. Getting help on a function, Assert Statement	24 <sup>th</sup> July to 31 <sup>st</sup> August , 2023	Assignment-1
<b>Unit-2</b>	Control Statements: if Conditional Statement, for and while Statements. break, continue and pass statements. Functions: Function Definition and Call, Function Arguments-Variable Function Arguments, Default Arguments, Keyword Arguments, Arbitrary Arguments. Command Line Arguments. Global and local Variables. Accessing local variables outside the scope, Using Global and Local variables in same code, Using Global variable and Local variable with same Name.	1 <sup>st</sup> September to 15 <sup>th</sup> September, 2023	Minor Test-1
<b>Unit-3</b>	Strings: String as a compound data type. String operations- Concatenation, Repetition, Membership operation, Slicing operation. String methods-count, find, rfind, capitalize, title, lower, upper, swapcase, islower, isupper, istitle, replace, isalpha, isdigit, isalnum. String Processing examples. Lists: List operations-multiplication, concatenation, length, indexing, slicing, min, max, sum, membership operator; List functions-append, extend, remove, pop, count, index, insert, sort, reverse.	16 <sup>th</sup> September to 31 <sup>st</sup> September, 2023	Minor Test-2

<b>Unit-4</b>	Object Oriented Programming: Introduction to Classes, Method, Class object, Instance object, Method object. Class as abstract data type, Data Class. Access attributes using functions-getattr, hasattr, setattr, delattr. Built-In Class Attributes of Class object ( __dict__, __doc__ , __name__, module__).	1 <sup>st</sup> October to 15 <sup>th</sup> October, 2023	Quiz
<b>Revision</b>	Revision of Syllabus and Students Query Handling	16 <sup>th</sup> October 2023 to Exam Date	Presentation



## Lesson Plan

**Government College, Hansi**      Unit wise Lesson Plan for **Odd Semester 24<sup>th</sup> July to 20th Nov.. 2023**  
 Name of Teacher: **Dr. Kapil Kumar**  
 Class: **BCA-Ist ( Ist Sem.)** Subject: **PC- Software**  
 Paper: **BCA-PC(L) -114 (Theory)**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Operating System, Definition and function, Basic of windows, Basic components of windows, Icons, Taskbar, activating window, desktop, title bar, managing files and folder, copying and moving files and folder, control panel, display properties, setting date and time, screen saver and appearance	25 <sup>th</sup> July to 20 <sup>th</sup> August	Assignment-1
<b>Unit-2</b>	Documentation using MS-Word, Introduction to office automation, creating and editing document. Auto text, auto correct, spelling and grammar checking, Page formatting, bookmark, advance features of MS word, mail Merge, macro, tables, template	21 <sup>st</sup> August.  to 21 <sup>st</sup> September.	Test-1
<b>Unit-3</b>	Electronic spreadsheet using MS excel, Introduction to MS-Excel, creating and editing spread sheet, formatting and essential operations, formulas and functions, charts, advances features of MS- Excel, Pivot table, pivot chart, linking and consolidation, sorting, filtering, table, validation	22 <sup>nd</sup> September  to 20 <sup>th</sup> October.	Assignment-2
<b>Unit-4</b>	Presentation using MS- Power point, presentation, creating, manipulating and enhancing slides, organizational charts, excel charts, word, art, layering art objects, animation and sounds, inserting animated pictures or accessing through object, inserting recorded sound effects or In-built sound effect.	21 <sup>st</sup> October.  to 20 <sup>th</sup> November	Test-2
<b>Revision</b>		21 <sup>st</sup> November. to Exam Date	

## Lesson Plan

**Government College, Hansi**      Unit wise Lesson Plan for **Odd Semester 24<sup>th</sup> July to 20th Nov.. 2023**  
Name of Teacher: **Dr. Kapil Kumar**  
Class: **BCA-III ( Vth Sem.)**      Subject: **Software Engineering**  
Paper: **BCA-PC(L) -353 (Theory)**

Unit	Description of Chapter / Topics	Duration		Assignment / Test
<b>Unit-1</b>	Software Crisis – problem and causes, Software life cycle models: Waterfall, Prototype, Evolutionary and Spiral models. Software Project Planning: Cost estimation: COCOMO model, Project scheduling, project monitoring.	25 <sup>th</sup> July to 20 <sup>th</sup> August		Assignment-1
<b>Unit-2</b>	Software Requirement Analysis and Specifications: Structured Analysis, Data Flow Diagram, Data Dictionaries, Software Requirement and Specifications, Behavioral and non-behavioral requirements. Software Design: Design fundamentals, problem partitioning and abstraction, design methodology, Cohesion & Coupling, Classification of Cohesiveness & Coupling.	21 <sup>st</sup> August. to 21 <sup>st</sup> September.		Test-1
<b>Unit-3</b>	Software Configuration Management, Quality Assurance, Risk Management, Software Maintenance: Type of maintenance, Management of maintenance..	22 <sup>nd</sup> September to 20 <sup>th</sup> October.		Assignment-2
<b>Unit-4</b>	Coding: Programming style, structured programming. Software testing: Testing fundamentals, Functional testing: Boundary Value Analysis, Equivalence class testing, Decision table testing, Cause effect graphing, Software testing strategies:UNIT-testing,integration	21 <sup>st</sup> October. to 20 <sup>th</sup> November		Test-2

	testing, validation testing, System testing, Alpha and Beta testing.			
<b>Revision</b>		21 <sup>st</sup> November. to Exam Date		

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Naresh Kumar

Class: BCA-I

Subject: Computer and Programming Fundamental

Paper: BCA-PC (L)-113

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Computer Fundamentals: Definition, Block Diagram along with its components, characteristics and classification of computers, Applications of computer in various fields. Memory: Concept of primary and secondary memory, RAM, ROM, types of ROM, flash memory, Secondary storage devices, Sequential and direct access devices, viz. magnetic tape, magnetic disk, CD, DVD	04August to 10 Sept	Test
<b>Unit-2</b>	Computer hardware & software: I/O Devices, definition of software, relationship b/w hardware and software, types of software. Overview of operating system: Definition, functions of operating system, concept of multiprogramming, multi-tasking, multi-threading, multi-processing, time-sharing, real time, single user & multi-user operating system	11Sept to 30 Sept	Test
<b>Unit-3</b>	Planning the Computer Program: Concept of problem solving, Problem definition, Program design, Debugging, Types of errors in programming, Documentation. Techniques of problem solving: Flowcharting, algorithm, pseudo code, decision table, Structured programming concepts, Programming methodologies viz. top-down and bottom-up programming.	1Oct to 30 Oct	Assignment
<b>Unit-4</b>	Searching, Sorting & Merging: Linear and binary searching, Bubble, Selection and Insertion sorting. Computer Languages: Analogy with natural language, machine language, assembly language, highlevel language, compiler, interpreter, assembler, characteristics of a good programming language. Computer Virus: Definition, Types of viruses, Characteristics of viruses, anti-virus software.	01 Nov to 30 nov	Assignment Test

<b>Revision</b>		01 Dec to 20 Dec revision	Test
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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Naresh Kumar

Class: BCA-III

Subject: Cloud Computing

Paper: BCA-PE(L)-353

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Cloud Computing: Introduction to client server computing, Peer to Peer computing, Distributed computing, collaborative computing and cloud computing, Importance of cloud computing in current era, Characteristics, advantages and disadvantages of cloud computing.	24 July to 06 Sept	
<b>Unit-2</b>	Cloud Services: Functioning of cloud computing, Classification of cloud on the basis of services: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS): Definition, characteristics and their benefits.	7Sept to 05 Oct	Test
<b>Unit-3</b>	Cloud Architecture: Cloud computing Logical and service architecture, Types of clouds: Private cloud, Public cloud and Hybrid cloud, Comparison of a Private, public and hybrid clouds, Migrating to a cloud, Seven step model to migrate.	6 Oct to 30 Oct	Assignment
<b>Unit-4</b>	Applications: Business opportunities using cloud, Managing Desktop and devices in cloud, cloud as a type of distributed infrastructure, Application of cloud computing for centralizing Email communication, collaboration on schedules, calendars. Overview of major cloud service providers - Amazon Ec2, Google App Engine.	01 Nov to 30Nov	Assignment

<b>Revision</b>		1 Dec to 20 Dec	Test
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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Naresh Kumar

Class: BA-I

Subject: Computer and Programming Fundamental

Paper: BACS -111

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Computer Fundamentals: Introduction to Computers: Characteristics and Limitations of Computers, Evolution of Computers, Classification of Computers. Computer Languages. Computer Programs, Structured Programming Concepts Basic Computer Organization: Units of a computer, CPU, ALU, Memory Hierarchy, Registers, I/O devices. Mother Board	04August to 10 Sept	Test
<b>Unit-2</b>	Word Processing: Introduction to MS-Word, Creating & Editing: Formatting Document, Page, Table; Bookmark, Mail Merge, Macros. Spread Sheets: Introduction to MS-Excel, Creating & Editing Worksheet, Formatting data, Formulas and Functions, Creating Charts, Pivot Tables. Power Point Presentations: Creating, Manipulating & Enhancing Slides, Organizational Charts, Animations & Sounds, Inserting Animated Pictures.	11Sept to 30 Sept	Test
<b>Unit-3</b>	Operating Systems: Introduction to Operating System: Functions of Operating System, Services; Properties: Batch Processing, Multitasking, Multiprogramming, Interactivity, Distributed environment, Spooling; Types of Operating System: Single user and Multiuser, Batch OS, Multiprogramming OS, Multitasking OS, Real-Time OS, Time-Sharing OS, Distributed OS, Network OS.	1Oct to 30 Oct	Assignment
<b>Unit-4</b>	Internet Basics: History of Internet, Web Browsers, Web Servers, Hypertext Transfer Protocol, Internet Protocols Addressing, Internet Connection Types, How Internet Works, ISPs, Search Engines, Emails and Its Working, Internet Security, Uses of Internet, Computer Networks and their advantages, Types of Computer Network, Network Topologies, Basics of Transmission Media. Cloud Computing Basics:	01 Nov to 30 nov	Assignment Test

	Overview, Applications, Intranets and the Cloud. Benefits, Limitations and Security Concerns. Text/Referenc		
<b>Revision</b>		01 Dec to 20 Dec revision	Test

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Naresh Kumar

Class: BA-I

Subject: Programming in 'C'

Paper: BACS -112

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Introduction to C Programming: History of C, Character Set, Identifiers and Keywords, Constants, Types of C Constants, Rules for Constructing Integer, Real and character Constants, Variables, Data Types, rules for constructing variables. Input/output: Unformatted & formatted I/O function, Input functions: scanf(), getch(), getche(), getchar(), gets(); output functions: printf(), putchar(), puts(). Operators and Expressions: Arithmetic, relational, logical, bitwise, unary, assignment, conditional operators and special operators, Type Conversion in Assignments, Hierarchy of Operations, Structure of a C program.	04August to 10 Sept	Test
<b>Unit-2</b>	Decision Control Structure: Decision making Decision making with IF statement, IF-ELSE statement, Nested IF statement, ELSE-IF ladder. Loop Control Structure: While and do-while, for loop and Nested for loop, Case Control Structure: Decision using switch; goto, break and continue statements. Functions: Library functions and user defined functions, Global and Local variables, Function Declaration, Calling and definition of	11Sept to 30 Sept	Test



	function, Methods of parameter passing to functions, recursion, Storage Classes in C.		
<b>Unit-3</b>	Arrays: Introduction, Array declaration, Accessing values in an array, Initializing values in an array, Single and Two Dimensional Arrays, Initializing a 2-Dimensional Array, Passing array elements to a function: Call by value and call by reference, Arrays of characters, Insertion and deletion operations, Searching the elements in an array, Using matrices in arrays, Passing an Entire Array to a Function. Pointers: Pointer declaration, Address operator “&”, Indirection operator “*”, Pointer and arrays, Pointers and 2-Dimensional Arrays, Pointer to an Array, Passing 2-D array to a Function, Array of Pointers. Dynamic Memory Allocation: malloc(), calloc(), realloc(), free() functions.	1Oct to 30 Oct	Assignment
<b>Unit-4</b>	String Manipulation in C: Declaring and Initializing string variables, Reading and writing strings, String Handling functions (strlen(), strcpy(), strcmp(), strcat(), strrev()). Structures and Unions: Declaration of structures, Structure Initialization, Accessing structure members, Arrays of structure, Nested structures, Structure with pointers, Union. Files in C: Introduction, Opening and Closing files, Basic I/O operation on files.	01 Nov to 30 nov	Assignment Test
<b>Revision</b>		01 Dec to 20 Dec revision	Test

## Lesson Plan

Government College, Hansi

### Unit wise Lesson Plan for Odd Semester 2023-24

Department: Computer Science

Name of Teacher: **Dr. Suman Malik**

Class: **BCA I (1<sup>st</sup> Sem.)**

Subject: **Problem Solving Through C**

Paper: **BCA-PC(L)-115**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Overview of C: History of C, Importance of C, Structure of a C Program. Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables, Assignment statement, Symbolic constant. Operators & Expression: Arithmetic, relational, logical, bitwise, unary, assignment, conditional operators and special operators. Arithmetic expressions, evaluation of arithmetic expression, type casting and conversion, operator hierarchy & associativity.	21 <sup>ST</sup> July, 2023 To 20 <sup>th</sup> August, 2023	Oral Test
<b>Unit-2</b>	Decision making & looping: Decision making with IF statement, IF-ELSE statements, Nested if statement, ELSE-IF ladder, switch statement, goto statement, while, and do-while loop, jumps in loops, break, continue statement. Functions: Definition, prototype, passing parameters, recursion.	21 <sup>st</sup> August, 2023 to 20 <sup>th</sup> September, 2023	Assignment-1
<b>Unit-3</b>	Arrays in 'C': Definition, types, initialization, processing an array, passing arrays to functions, Strings & arrays. Declaration and initialization of string, String I/O, Array of strings, String manipulation functions: String length, copy, compare, concatenate, search for a sub-string.	21 <sup>st</sup> September, 2023 to 20 <sup>th</sup> October, 2023	Test

<b>Unit-4</b>	<p>Storage classes in C: auto, extern, register and static storage class, their scope, storage &amp; lifetime.</p> <p>Pointers: Introduction, Pointer variables, Pointer operators, Pointer assignment, Pointer conversions, Pointer arithmetic, Pointer comparison, Pointers and arrays, Pointers and functions, Pointers and strings, dynamic allocation using pointers.</p>	<p>21<sup>st</sup> October, 2023</p> <p>to</p> <p>9<sup>th</sup> November, 2023</p>	<p>Assignment- 2</p>
<b>Revision</b>	Revision of Syllabus and Students Query Handling	<p>10<sup>th</sup> November, 2023</p> <p>to</p> <p>Exam Date</p>	

## Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2023-24

Department: Computer Science

Name of Teacher: **Dr. Suman Malik**

Class: PGDCA (1<sup>st</sup> Sem.)

Subject: **Web Technologies**

**Paper: PGDCA-105**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction to Internet, World Wide Web, Evaluation and History of WWW, Basic features, Web Browsers, Web servers, Hypertext transfer Protocol, URLs, Searching and Web Casting techniques, Search Engines and Search tools	16 <sup>th</sup> August, 2023 to 5 <sup>th</sup> September, 2023	Mock Test
<b>Unit-2</b>	Web publishing, Hosting your site, Internet Service Provider, Planning and designing web site, Steps for developing your site, Choosing the contents home page, Domain name, Creating a website, Website and its categories.	6 <sup>th</sup> Sept., 2023 to 30 <sup>th</sup> Sept., 2023	Assignment-1
<b>Unit-3</b>	Web Development: Introduction to HTML, Hypertext and HTML, HTML document features, HTML document Structures, HTML command tag, Creating Links, Header, Text styles, Text Structuring, Text colour and Background, Formatting Text, Page Layout.	1 <sup>st</sup> October, 2023 To 20 <sup>th</sup> October, 2023	Test-1

<b>Unit-4</b>	Images: Ordered and unordered List, Inserting Graphics, Images as hyperlink, Table creation and layout, frame creation and layout, working with forms and menus, working with radio button, check box and text box	21 <sup>st</sup> October, 2023  To 9 <sup>th</sup> November, 2023	Assignment-2
<b>Revision</b>		10 <sup>th</sup> November, 2023 to Exam Date	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Priyanka  
Subject: Advanced Data Structures

Class: BCA-II  
Paper: BCA-PC(L)-235

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Tree: Introduction, Definition, Representing Binary tree in memory, Traversing binary trees, Traversal algorithm using stacks, Header nodes, Threads, Binary search trees- Searching, Insertion and Deletion	24 <sup>th</sup> July to 20 <sup>th</sup> August , 2023	Assignment-1
<b>Unit-2</b>	AVL search trees: Introduction, Insertion and Deletion, m-way search tree: searching, insertion and deletion, B-tree: Insertion and deletion. Hashing: Introduction, Collision resolution.	21 <sup>st</sup> August to 15 <sup>th</sup> September, 2023	Minor Test-1
<b>Unit-3</b>	Graphs: Introduction, Graph theory terminology, Sequential and linked representation of graphs, Warshall's algorithm for shortest path, Dijkstra algorithm for shortest path, Operations on graphs, Traversal of graph.	16 <sup>th</sup> September to 3 <sup>rd</sup> October, 2023	Assignment-2
<b>Unit-4</b>	Sorting: Internal & external sorting, Radix sort, Quick sort, Heap sort, Merge sort, Comparison of various sorting and searching algorithms on the basis of their complexity.	4 <sup>th</sup> October to 26 <sup>th</sup> October, 2023	Minor Test-2 Quiz
<b>Revision</b>	Revision of Syllabus and Students Query Handling	27 <sup>th</sup> October 2023 to Exam Date	Presentation

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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Priyanka

Class: BCA-II

Subject: Web Designing

Paper: BCA-PC(L)-232

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction to Internet and World Wide Web; Evolution and History of Word Wide Web; Basic features; Web Browsers; Web servers; Hypertext Transfer Protocol; URLs; Searching and Web-Casting Techniques; Search Engines and Search Tools.	24 <sup>th</sup> July to 20 <sup>th</sup> August , 2023	Assignment-1
<b>Unit-2</b>	Web Publishing: Hosting your Site; Internet Services provider; Planning and designing your Web Site; Steps for developing Your site; Choosing the contents; Home page; Domain Names.	21 <sup>st</sup> August to 15 <sup>th</sup> September, 2023	Test-1
<b>Unit-3</b>	Web Development: Introduction to HTML; Hypertext and HTML; HTML Document Features; HTML command Tags; Creating Links; Headers; Text styles; Text Structuring; Text colors and Background; Formatting text; Page layouts.	16 <sup>th</sup> September to 3 <sup>rd</sup> October, 2023	Assignment-2
<b>Unit-4</b>	Images; Ordered and Unordered lists; Inserting Graphics; Table Creation and Layouts; Frame Creation and layouts; Working with Forms and menus; Working with Radio buttons; Checks Boxes; Text Boxes.	4 <sup>th</sup> October to 26 <sup>th</sup> October, 2023	Test-2  Quiz
<b>Revision</b>	Revision of Syllabus and Students Query Handling	27 <sup>th</sup> October 2023 to Exam Date	Presentation



Subject:DBMS  Paper: BACS- 201Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Basic Concepts: A Historical perspective, File Systems vs. DBMS, Characteristics of the Data Base Approach, Abstraction and Data Integration, Database users, Advantages and Disadvantages of DBMS, DBMS architecture, Data Models, Schemas and Instances, Data Independence	25 July To 14 Aug.	
<b>Unit-2</b>	Entity Relationship (ER) Model: Basic Concepts-Entity, Attributes, Types of Attributes, Entity set and Keys; Relationships-Relationship set, Degree of Relationship, Mapping Cardinalities. ER diagram representation-Representation of Entity, Attributes and Relationship. Binary Representation and Cardinality, Participation Constraints.	16 Aug. to 28 Aug.	
<b>Unit-3</b>	Relational Model : Relational model concepts (Tables, Tuple, Relation instance, Relation schema, Relation key, Attribute domain), Constraints- Key constraints, Domain constraints, Referential integrity constraints;Relational algebra, Basic operations: Select,Project,Union,Set difference, Cartesian product, Rename.	29 Aug. To 11 Sept.	Assignment
<b>Unit-4</b>	Relational Database design: Mapping ER model to relational database, functional dependencies, Lossless decomposition, Desirable properties of decomposition, Normal forms (1 NF, 2 NF, 3 NF and BCNF).  SQL: Why SQL, Data Types; DDL-Create, Alter and Drop table Commands. DML-SELECT/ FROM/ WHERE, INSERT INTO/ VALUES, UPDATE /SET/ WHERE,	12 Sept.to 25 Sept.	Test

	DELETE Commands. UNION [ALL], INTERSECTION and MINUS Operators.		
<b>Revision</b>			

***Lesson Plan***

**Government College, Hansi**

**Unit wise Lesson Plan for ODD Semester 2023-24**

**Department: Computer science**

Name of Teacher: Sat kumar

Class: B.A-II

Subject: Operating System

Paper: BACS-202

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	<p>Structure of Operating Systems: Layers-MS-DOS Layer Structure, Traditional UNIX System Structure; Running Multiple Operating Systems, Running a Virtual Operating System, Operating System Modes, System Boot.</p> <p>Process Management: Introduction to Process, Attributes of a process, Process States, Operations on the Process, Process Schedulers, CPU Scheduling, Scheduling Algorithms, Purpose of a Scheduling algorithms, Introduction to FCFS, Shortest Job First (SJF), Shortest Job First (SJF), Round Robin Scheduling Algorithms.</p>	26 Sept To 9 Oct..	
<b>Unit-2</b>	<p>Memory Management: Fixed and Dynamic partition, Physical and Logical Address Space, Page Table, Mapping from page table to main memory, Page Table Entry, Size of the page table, Finding Optimal Page Size. Virtual Memory Concepts, Advantages and disadvantage of Virtual Memory. Segmentation, Translation of Logical address into physical address by segment table, Advantages and disadvantage of Segmentation. Paging VS Segmentation</p>	10 Oct. to 23 Oct	Assignment
<b>Unit-3</b>	<p>File Management: Attributes of File, Operations on File; File Access Methods-Sequential, Direct and Indexed Access; Directory Structure, File Systems, File System Structure-different layers; Master Boot Record, Directory Implementation-Linear List and Hash Table; Disk space Allocation Methods Contiguous Allocation and FAT.</p>	25 Oct.to 10 Nov.	Test

<b>Unit-4</b>	Shell introduction and Shell Scripting: What is shell and various type of shell, Various editors present in Linux/Unix; Different modes of operation in vi editor; Shell script, Writing and executing the shell script, Shell variable (user defined and system variables); System calls, Pipes and Filters, Decision making in Shell Scripts (If else, switch), Loops in shell, Utility programs (cut, paste, join, tr , uniq utilities), Pattern matching utility (grep)	17 Nov.to Till exam.	
<b>Revision</b>			

**Lesson Plan**  
**Government College, Hansi**

**Unit wise Lesson Plan for ODD Semester 2023-24**

**Department: Computer science**

Name of Teacher: Sat kumar

Subject: DWDM

Class: BCA-III

Paper: BCA(PC)L-354

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Data Mining: Introduction, Kind of data to be mined, Data Mining Functionalities, Technologies used in Data Mining, Applications of data Mining, Major Issues in Data Mining.	25 July to 18 August	
Unit-2	Data Pre-Processing: Introduction, Need of preprocessing, Data Objects and Attribute type, Statistical description of data, Data Visualization, Measuring similarity and dissimilarity of data, Data Cleaning, Data Integration, Data Reduction, Data Transformation and Data Discretization	19 Aug. to 11 Sept.	Assignment-1
Unit-3	Data Warehouse: Introduction, Data Warehouse and Database Systems, Data Warehouse Architecture, Data Warehouse Models, Data Cube and OLAP, Multidimensional data Model, Concept Hierarchies, OLAP operations, Data Warehouse Implementation	12 Sept to 3 Oct.	Test
Unit-4	Mining Frequent Patterns, Associations and Correlations: Introduction, Frequent Itemset Mining using Apriori Algorithm, Generating Association Rule from Frequent Itemsets. Improving efficiency of Apriori, Pattern Growth Approach for Mining Frequent Itemsets, Pattern evaluation Methods.	4 Oct. to 30 Oct.	Assignment-2
Revision		November	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Even Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Sushil Kumar

Class: BCA –III rd

Subject: COMPUTER GRAPHICS

Paper: **BCA-PC(L)-352**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Graphics Primitives: Introduction to computer graphics, Basics of Graphics systems, Application areas of Computer Graphics, overview of graphics systems, video-display devices, and raster-scan systems, random scan systems, graphics monitors and workstations and input devices. Output Primitives: Points and lines, line drawing algorithms, mid-point circle and ellipse algorithms. Filled area primitives: Scan line polygon fill algorithm, boundary fill and floodfill algorithms .	27/07/2023-10/09/2023	
<b>Unit-2</b>	2-D Geometrical Transforms: Translation, scaling, rotation, reflection and shear transformations, matrix representations and homogeneous coordinates, composite transforms, transformations between coordinate systems. 2-D Viewing: The viewing pipeline, viewing coordinate reference frame, window to viewport coordinate transformation, viewing functions, Cohen-Sutherland and Cyrus-beck line clipping algorithms, Sutherland –Hodgeman polygon clipping algorithm.	11/09/2023-28/09/2023	
<b>Unit-3</b>	3-D Object Representation: Polygon surfaces, quadric surfaces, spline representation, Hermite curve, Bezier curve and B-Spline curves, Bezier and B-Spline surfaces. Basic illumination models, polygon rendering m	03/10/2023-21/10/2023	
<b>Unit-4</b>	3-D Geometric Transformations: Translation, rotation, scaling, reflection and shear transformations, composite transformations. 3-D Viewing: Viewing pipeline, viewing coordinates,	22/10/2023-10/11/2023	

	view volume and general projection transforms and clipping..		
<b>Revision</b>			

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Even Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Sushil Kumar

Class: BA 5<sup>th</sup> sem

Subject: **Object Oriented Programming Using 'C++'**

Paper: **BACS- 311**

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Procedure Oriented Programming, Object-Oriented programming Paradigm, difference between Procedure Oriented Programming and Object-Oriented programming, Basic concepts of Object-Oriented programming, Benefits of OOP, Object Oriented Languages, and application of OOP. Structure of a C++ Program, Insertion operator, Extraction operator, Hierarchy of Console Stream Classes, Unformatted and Formatted I/O Operations, Manipulators, inline functions.	27/07/2023-10/08/2023	
<b>Unit-2</b>	C structure revisited, specifying a Class, Creating Objects, Defining member function, Memory allocation for objects, Scope resolution operator and its significance, Static Data Members, Static member functions, Friend Function, Friend Class.	11/08/2023-21/08/2023	
<b>Unit-3</b>	Dynamic Memory Management using new and delete Operator , Constructor, type of constructors,	22/08/2023-02/09/2023	



	Dynamic initialization of objects, Constructor overloading, Constructor with default arguments, Destructors, function overloading, Operator Overloading, Overloading unary and binary operators.		
<b>Unit-4</b>	Inheritance, Single Inheritance, Making a private member inheritable, Multilevel Inheritance, Multiple Inheritance, Hierarchical Inheritance, Hybrid Inheritance, Virtual Base Class. Abstract Classes, Constructors in derived classes.	02/09/2023-29/09/2023	
<b>Revision</b>			

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Even Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Sushil Kumar

Class: BA 5<sup>th</sup> sem

Subject: **DATA ANALYTICS'**

Paper: **BACS- 312**

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	<b>Data Analytics:</b> Introduction to Data Analytics, Business Intelligence (BI) for better decisions, Decision types, BI tools, BI skills, BI applications. <b>Data warehousing:</b> Introduction to Data warehousing (DW), Design considerations for DW, DW development approaches, DW architecture. <b>Data Mining:</b> Introduction to Data mining, Data cleaning and preparation, outputs of Data mining, evaluation of data mining results, Data Mining Techniques.	29/09/2023-10/10/2023	
<b>Unit-2</b>	<b>Decision Trees:</b> Introduction to Decision tree, Decision tree problem, Decision tree construction, Lessons from constructing trees, Decision tree algorithms. <b>Regression:</b> Introduction, Correlations and Relationships, Visual Look at Relationships, Logistic regression, Advantages and disadvantages of regression models.	11/10/2023-17/10/2023	

	Artificial Neural Networks: Introduction, business applications of ANN, Design principles of an ANN, Representation of a neural network, Architecting a neural network, Developing an ANN, Advantages and disadvantages of using ANN		
<b>Unit-3</b>	<b>Cluster analysis:</b> Introduction, Applications of cluster analysis, Definition of a cluster, Representing clusters, Clustering techniques, K-means algorithm for clustering, Selecting the number of clusters. <b>Association rule Mining:</b> Introduction, Business applications of association rules, Representing association rules, Algorithms for association rule, Apriori algorithm, Creating association rules. <b>Web Mining:</b> Introduction, Web content mining, Web structure mining, Web usage mining, Web mining algorithms.	18/10/2023- 25/10/2023	
<b>Unit-4</b>	<b>Naïve-base analysis:</b> Introduction, Probability, Naïve base model, Text classification example. Support vector machines: Introduction, SVM model, The kernel method, Big data: Introduction, Defining big data, Big data landscape, Business implications of big data, Technology implications of big data, Big data technologies, Management of big data.	26/10/2023 05/11/2023	
<b>Revision</b>			

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for odd Semester 2022-23**

**Department: Computer Science**

Name of Teacher: Uma Sharma

Class: PGDCA

Subject: Programming in C

Paper: PGDCA102

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	<p>Programming process: Problem definition, Algorithm development, Flowchart, Program Coding, compilation, debugging, testing and execution, Types of errors.</p> <p>C Programming Fundamentals: Identifiers and keywords, Structure of C Program data types, input and output, type conversion.</p>	24 <sup>th</sup> August to 14 <sup>th</sup> September 2023	Assignment-1
Unit-2	<p>Operators &amp; Expressions: Arithmetic, unary, logical and relational operators, assignment operator, Bit-wise, conditional operator, library functions. Control statements: Decision making using if, if-else, Nested IF, Else If Ladder switch, break, continue statement and goto Statement, looping using for, while and do-while statements, nested loops.</p>	15 <sup>th</sup> September to 9 <sup>th</sup> October, 2023	Minor Test-1
Unit-3	<p>Functions: Library functions, Defining &amp; accessing User defined functions, function prototype and passing arguments to a function, recursion versus iteration. Macro vs function. Arrays: Definition, accessing elements, initialization, passing to functions, multi-dimensional arrays, Strings &amp; operations of Strings, String Handling through Built-in and User Defined Functions. Pointers declaration, assignment, Pointer Arithmetic, passing pointer to functions, pointer arrays, Dynamic Memory Allocation.</p>	10 <sup>th</sup> October  to 25 <sup>th</sup> October, 2023	Minor Test-2
Unit-4	<p>Structure and Union: Defining and Initializing Structure, accessing members, nested structures,</p>	26 <sup>th</sup> October	Quiz

	pointer to structures, self-referential structures, Unions: Introduction to Unions and its Utilities. File Handling and Storage classes: automatic, register, external and static variables; Opening and Closing file in C, Modes of File, Reading and Writing data to a file.	to 22 <sup>th</sup> November, 2023	
<b>Revision</b>	Revision of Syllabus and Students Query Handling	23 <sup>th</sup> November 2022 to exam date	Presentation

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for odd Semester 2023-24**

**Department: Computer Science**

Name of Teacher: Uma Sharma

Class: BCA

Subject: DBMS

Paper: BCA-PC(L)-234

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit 1</b>	Basic Concepts- Data, Information, Records and Files. Traditional file –based System- File based Approach-Limitations of File based Approach, Database Approach- Characteristics of File based Approach, Database Management System(DBMS), Components of DBMS Environment, DBMS Functions and Components, Advantages and Disadvantages of DBMS.	27 <sup>th</sup> August to 15 <sup>th</sup> September , 2023	Assignment-1
<b>Unit 2</b>	Roles In the Database Environment – Data and Database Administrator, Database Designers, Applications Developers and Users. Database System Architecture – Three Levels ofArchitecture, External, Conceptual and Internal Levels, Schemas, Mappings and Instances. Data Independence – Logical and Physical data Independence.	16 <sup>th</sup> September to 30 <sup>st</sup> September, 2023	Test-1
<b>Unit 3</b>	Classification of Database Management System, centralized and Client Server Architecture to DBMS. Data Models: Records-based data Models, Object-based Data models, Physical Data Models and Conceptual Modeling.	1 <sup>st</sup> October to 21 <sup>st</sup> October, 2023	Test-2

<b>Un</b>	Entity-Relationship model – Entity Types, Entity Sets, Attributes relationship Types, Relationship Instances and ER Diagrams. Basic Concepts of Hierarchical and Network Data Model.	22nd October to 8 November 2023	Mock Test
<b>Revision</b>	Revision of Syllabus and Students Query Handling	8 <sup>th</sup> November 2023 to Exam Date	Presentation

**Government College Hansi**

**Unit wise Lesson Plan for Odd Semester, 2023-2024**

Name of Teacher: **Bhateri**

Class: **B.A. 5<sup>th</sup> Semester**

Subject: **Economics of Development**

Paper: **Theory**

<b>Unit</b>	<b>Description of Chapter/Topic</b>	<b>Duration</b>	<b>Assignment/Test</b>
<b>Unit 1</b>	Economic Growth and Development, Development and underdevelopment Economic, Factors affecting economic growth	4 <sup>th</sup> week of July to 2 <sup>nd</sup> week of August	Verbal Test
<b>Unit 2</b>	Poverty, Human Development Index, Population Problem and growth pattern of population in developing countries.	2 <sup>nd</sup> week of to August 1 <sup>st</sup> week of September	1 <sup>st</sup> Assignment in 4 <sup>th</sup> week of August
<b>Unit 3</b>	Traditional Measurement of Economics Development- National Income, Per Capita Income, UNDP, Classical theory of Development	2 <sup>nd</sup> week of September to 2 <sup>nd</sup> week of Oct	Class test of 3 <sup>rd</sup> week
<b>Unit 4</b>	Steady State Growth Models - Harrod Domer, Neo Classical Model of Growth, Cambridge Model of Growth.	3 <sup>rd</sup> week of Oct 1 <sup>st</sup> week of Nov	2 <sup>nd</sup> Assignment in the 4 <sup>th</sup> week of Oct
<b>Revision</b>	Revision, problem solving	2 <sup>nd</sup> week of November to 4 <sup>th</sup> week of Nov	

**Head of the Department (Economics)**

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**  
**Department Of Economics**

Name of Teacher: Ms. Bhateri

Class: B.A 1<sup>st</sup> semester

Subject: Economics

Paper: Principal Of Microeconomics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Nature and, scope of economics, the economics problem scarcity and choice, economics system: Characteristics and Function, Demand and Supply and market Equilibrium, Applications of Demand and Supply, Elasticity of Demand	1 <sup>st</sup> week of August to 4 <sup>th</sup> week of August	Verbal Test
<b>Unit-2</b>	Utility Analysis and Consumers Equilibrium, Indifference Curves Analysis and Consumers Equilibrium	1 <sup>st</sup> week of Sept to 3 <sup>rd</sup> Week of September	1 <sup>st</sup> Assignment in 1 <sup>st</sup> week of Sept



<b>Unit-3</b>	Production Function and law of production, Isoquants and isocost Lines: producer Equilibrium, Elasticity of Supply	4 <sup>th</sup> week of Sept to 3 <sup>rd</sup> week Oct.	Class test in the 1 <sup>st</sup> week of Sept
<b>Unit-4</b>	Theory of cost, Concepts of Revenue, break even Points and its uses	4 <sup>th</sup> week of Oct to 2 <sup>nd</sup> week of November	2 <sup>nd</sup> Assignment in the last week of Oct.
<b>Revision</b>	Revision and problem solving	3 <sup>rd</sup> week of Nov to 4 <sup>th</sup> week of Nov.	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**  
**Department of Economics**

Name of Teacher: Ms Bhateri

Class: B.Com 1<sup>st</sup> semester

Subject: Economics

Paper: Microeconomics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Nature and, scope of economics, Demand and Supply and market Equilibrium, Applications of Demand and Supply, Elasticity of Demand , Concept of Supply and Law of Supply	1 <sup>st</sup> week of August to 4 <sup>th</sup> week August	Verbal Test
<b>Unit-2</b>	Utility Analysis and Consumers Equilibrium, Indifference Curves Analysis and Consumers Equilibrium	1 <sup>st</sup> week of Sept to 3 <sup>rd</sup> September	Assignment in 2 <sup>nd</sup> week of Sept

<b>Unit-3</b>	Production Function and law of production, Isoquants and isocost Lines: producer Equilibrium, Elasticity of Supply, Theory of cost, Concepts of Revenue,	4 <sup>th</sup> week of Sept to 3 <sup>rd</sup> week Oct.	1 <sup>st</sup> test in the 1 <sup>st</sup> week of Oct.
<b>Unit-4</b>	Market:-Price and output determination under Perfect Competition Market, under Monopoly Market and under Monopolistic Competition Market	4 <sup>th</sup> week of Oct to 2 <sup>nd</sup> week of November	2 <sup>nd</sup> test in 1 <sup>st</sup> week of Nov
<b>Revision</b>	Revision and problem solving	3 <sup>rd</sup> and 4 <sup>th</sup> week of Nov	Viva and Presentation

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2022-24**  
**Department of Economics**

Name of Teacher: Ms Bhateri

Class: B.A 3<sup>rd</sup> Semester

Subject: Economics

Paper: Principal Of Macroeconomics

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction of Macroeconomics, Circular flow of income, National Income :-Concept and measurement	4 <sup>th</sup> week of July to 2 <sup>nd</sup> week of August	--
<b>Unit-2</b>	Consumption Function, Investment Function, Investment Multiplier	3 <sup>rd</sup> week of August. To 1 <sup>st</sup> week of Sept	Class test in 1 <sup>st</sup> week of Sept.
<b>Unit-3</b>	Classical and Keynesian theory of Income, Output and Employment, Say's Law of Market, Principal of Effective Demand	2 <sup>nd</sup> week of Sept to 2 <sup>nd</sup> week of October	Assignment-1 <sup>st</sup> in 2 <sup>nd</sup> week of Sept

<b>Unit-4</b>	Money: function and , Definition and role, quantity theory of Money, Fisher equation and Cambridge equation, Liquidity theory of Keynesian, Banking: Major Function of Commercial Bank and process of credit creation	3 <sup>rd</sup> week of Oct to to 3 <sup>rd</sup> week of Nov	Verbal test and 2 <sup>nd</sup> assignment
<b>Revision</b>	Revision and problem solve	4 <sup>th</sup> week of November	

**Govt. College, Hansi**

**Lesson Plan**

Unit wise Lesson Plan for the Odd Semester 2023-24

**Name of Teacher:** Dr. Mukesh Kumar

**Class:** B.A. -1<sup>st</sup> (1<sup>st</sup> Semester)

**Section:** E

**Subject:** English (Compulsory)

<b>Description/Topic</b>	<b>Duration</b>	<b>Assignment/ Test</b>
<b>Chapter</b> 1. Speech Sounds 2. Choosing Our Universe 3. Are Dams the Temples of Modern India?	4 <sup>th</sup> week of July to 2 <sup>nd</sup> week of August	
<b>Chapter</b> 4. The Generation Gap 5. Language and National Identity 6. Wounded Plants 7. Playing the English Gentleman	3 <sup>rd</sup> week of August to 1 <sup>st</sup> week of September	1 <sup>st</sup> Assignment in the 4 <sup>th</sup> week of August
<b>Chapter</b> 8. Great Books Born out of Great Minds 9. The Responsibility of Young Men 10. Bharat Mata	2 <sup>nd</sup> week of September to 4 <sup>th</sup> week of September	Minor test in the 3 <sup>rd</sup> week of September
<b>Integrated Grammar</b> Parts of Speech, Correct uses of Tenses and Common Error	1 <sup>st</sup> week of October to 1 <sup>st</sup> week of November	2 <sup>nd</sup> Assignment in the 2 <sup>nd</sup> week of October
Revision All Chapters and Grammar	2 <sup>nd</sup> week of November to last week of November	

**Govt. College, Hansi**

**Lesson Plan Format**

**Unit wise Lesson Plan for the Odd Semester 2023-2024**

**Name of Teacher:** Dr. Mukesh Kumar

**Class:** B.A. 5<sup>th</sup> Semester

**Sections:** A,C&E

**Subject:** English( Compulsory)

Unit/ Chapter	Duration	Assignment/ Test
Unit 1 <sup>st</sup> , Introduction to the novel 'Kanthapura' Chapter 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> & 4 <sup>th</sup> Transcription & Primary Stress	1 <sup>st</sup> week of August to 2 <sup>nd</sup> week of August	
Unit 2 <sup>nd</sup> , Chapter 5 <sup>th</sup> , 6 <sup>th</sup> , 7 <sup>th</sup> , 8 <sup>th</sup> & 9 <sup>th</sup> Intonation	3 <sup>rd</sup> week of August to 1 <sup>st</sup> week of September	Minor test in the 4th week of August
Unit 3 <sup>rd</sup> , Chapter 10 <sup>th</sup> , 11 <sup>th</sup> , 12 <sup>th</sup> , 13 <sup>th</sup> & 14 <sup>th</sup> Transitional Words/Phrases	2 <sup>nd</sup> week of September to last week of September	1 <sup>st</sup> Assignment in the 3rd week of September
Unit 4 <sup>th</sup> , Chapter 15 <sup>th</sup> , 16 <sup>th</sup> , 17 <sup>th</sup> , 18 <sup>th</sup> & 19 <sup>th</sup> Sentences & Paragraph Writing	1 <sup>st</sup> week of October to 3 <sup>rd</sup> week of October	2 <sup>nd</sup> Assignment in the 2nd week of October
Revision for all the Chapters of the Novel 'Kanthapura', Phonetics, Grammar & Composition	Last week October to the Commencement of the Exams	

**Govt. College, Hansi**

**Lesson Plan**

**Unit wise lesson plan for the Odd Semester 2023-2024**

**Teacher: Dr. Mukesh Kumar**

**Class : B. A II<sup>nd</sup>**

**Subject: English ( Compulsory)**

**Section: C&D (3rd Semester)**

<b>Unit No.</b>	<b>Description of Chapters/ Topic</b>	<b>Expected Duration</b>	<b>Assignment/Test</b>
Unit 1	Important poetic Forms and Devices Sonnet XVIII Know Then Thyself Non-Finite Verbs: Infinitive and Gerund	1 <sup>st</sup> week of August to 3 <sup>rd</sup> week of August	1 <sup>st</sup> Assignment in the Month of August
Unit 2	Elegy Written in a Country Churchyard The World is Too Much With Us Grammar : Prepositions	Last week of August to 2 <sup>nd</sup> week of September	Minor Test In the Month of September
Unit 3	Ode on a Grecian Urn My Last Duchess When You are Old Grammar : Clauses and its Types	3 <sup>rd</sup> week of September to 1 <sup>st</sup> week of October	2 <sup>nd</sup> Assignment in the month of October
Unit 4	Where the Mind is without Fear The Bangle Sellers Another Women Grammar : Verb Patterns Prefixes and Suffixes Essay Writing	2 <sup>nd</sup> week of October to 1 <sup>st</sup> week of November	
	Revision All Chapters (poems ) Grammar & Compositions	2 <sup>nd</sup> week of November to the Commencement of the Exams	



**Govt. College, Hansi**

**Lesson Plan**

**Unit wise Lesson Plan for the Odd Semester 2023-24**

**Name of Teacher:** Dr. Mukesh Kumar

**Class:** BA 3<sup>rd</sup> (5<sup>th</sup> Semester)  
(Optional)

**Subject:** Functional English

Unit	Unit/ Description/Topic	Duration	Assignment/ Test
1.	1 On His Blindness, 2.Elexander Feast, 3.Epistle to Dr.Arbutnot, 4.Tintern Abbey, 5. Kubla Khan, 6 Ode to the West Wind, 7.Stanzs Written in Dejection, 8. Ode on Grecian Urn	1 <sup>st</sup> week of August to 3 <sup>rd</sup> week of August	1 <sup>st</sup> Assignment in 2 <sup>nd</sup> week of August
2.	9.Ode to a Nightingale, 10.Ulysses, 11. The Lotus Eater , 12 .Tears Idle Tears, 13 My Last Duchess, 14.Rabbi Ben Ezra, 15.The Last Ride Together, 16. The Scholar Gypsy, 17.Dover Beach	4 <sup>th</sup> week of August to 2 <sup>nd</sup> week of September	Minor test in 1 <sup>st</sup> week of September
3.	Business Letters and Faxes: different types of formats, address, Opening and closing Subject, heading, sub-heading, numbering , etc.	3 <sup>rd</sup> week of September to 1 <sup>st</sup> week of October	2 <sup>nd</sup> Assignment in 1 <sup>st</sup> week of October
4.	Scanning letters and faxes for specific information, acquiring familiarity with abbreviations and phrases commonly used in business correspondence	2 <sup>nd</sup> week of October to 3 <sup>rd</sup> week of October	
5.	Writing letters of application with curriculum vitac/ Resume letters of invitation, reply to invitation, Enquiry reference, arrangements announcing forthcoming Events, products, visits,making bookings,and arrangements for conferences trade fairs etc.,complaints and replies to complaints, apologies, thanks	last week of October to 1 <sup>st</sup> week of November	
	<b>Revision</b>  Communicative & Writing Skills	2 <sup>nd</sup> week of November to the	

		commencement of the Exams	
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### Lesson Plan

#### Unit wise lesson plan for the Odd Semester 2023-2024

**Teacher: Dr. Mukesh Kumar**

**Class : B. Sc. I (Hons) (Mathematics)**

**Subject: English**

**(Ist Semester)**

Unit No.	Description of Chapters/ Topic	Expected Duration	Assignment/Test
Unit 1	<b>Syntax</b> Sentence structure, verb patterns and their usage	Last week of July to 1st week of August	1 <sup>st</sup> Assignment in the month of August
Unit 2	<b>Phonetics</b> Basic Concepts- Vowels, Consonants, Phonemes , syllables; Articulation of Speech Sounds- Place and Manner of articulation; Transcription of words and simple sentences using International Phonetic Alphabets	2nd week of August to 4th week of August	
Unit 3	<b>Comprehension</b> Listening and Reading Comprehension Note taking, Reviewing and summarising, Interpreting, Paraphrasing and Precis Writing .	1st week of September to 3rd week of September	Minor test in the month of September
Unit 4	<b>Composition</b> Descriptive ,Explanatory, Analytical and Argumentative Writing-Description of simple objects like instruments, appliances, places persons, principles, description and explanation of process and operations; analysis and arguments in the form of debate and group discussion	Last week of September to last week of October	<b>2nd Assignment in the month of October</b>
	<b>Revision</b> Syntax, Phonetics, Comprehension and Compositions	<b>1st week of November to the Commencement of the Exams</b>	

**GOVERNMENT COLLEGE, HANSI LESSON PLAN****2023-24****CLASS: BA (First Semester)****NAME OF TEACHER: DR. HONEY SETHI SUBJECT: ENGLISH**

UNIT S	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS
	01AUG-15SEPT.	Chapter-1 Chapter-2 Chapter-3  With Exercise & Grammar	Assignment 1	
	16SEPT.-05OCT.	Chapter-4 Chapter-5 Chapter-6  With Exercise & Grammar	Test	
	06OCT. - 05NOV.	Chapter-7 Chapter-8 Chapter-9  With Exercise & Grammar	Assignment 2	
.	06 NOV.-15NOV.  16NOV.-Till Exam.	Chapter-10 Chapter-11  With Exercise & Grammar		

		<b>Revision</b>		
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**GOVERNMENT COLLEGE, HANSI LESSON PLAN**

**2023-24**

**CLASS: BA (Third Semester) NAME OF TEACHER: DR. HONEY SETHI**

**SUBJECT: ENGLISH**

<b>UNIT S</b>	<b>TIME PERIOD</b>	<b>TOPICS</b>	<b>TESTS AND ASSIGNMENTS</b>	<b>REMARKS</b>
	01 AUG. - 10 SEPT.	Chapter-1 Important Poetic Forms and Devices Chapter-2 Sonnet XVIII Chapter-3 Know Thyself  With Exercise & Grammar		
	11 SEPT.-05 OCT.	Chapter-4 Elegy Written in a Country Churchyard Chapter-5 The World is Too Much with Us Chapter -6 Ode on a Grecian Urn  With Exercise & Grammar	Assignment 1	

	06 OCT.– 31 OCT.	Chapter-7 My Last Duchess Chapter-8 When You are Old Chapter-9 Where the Mind is without Fear  With Exercise & Grammar	Test	
.	01 NOV.-15 NOV.  16 NOV-Till Exam.	Chapter-10 The Bangle Sellers Chapter-11 Another Woman  With Exercise & Grammar  <b>Revision</b>	Assignment 2	

**GOVERNMENT COLLEGE, HANSI LESSON PLAN****2023-24****CLASS: BA (Fifth Semester)****NAME OF TEACHER: DR. HONEY SETHI SUBJECT: ENGLISH**

NOVEL	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS
KANTHAPURA	01 AUG-31 AUG.	In detail :  Chapter-1 Chapter-2 Chapter-3 Chapter-4  With Exercise & Grammar		
	01 SEPT.-20 SEPT.	In detail :  Chapter-5 Chapter-6 Chapter -7 Chapter-8  With Exercise & Grammar	Assignment 1	
	21 SEPT.-05 OCT.	In detail :  Chapter-9 Chapter-10 Chapter-11 Chapter-12  With Exercise & Grammar	Test	
.	06 OCT.-31 OCT.	In detail :  Chapter-13 Chapter-14 Chapter-15	Assignment 2	

	Chapter-16		
	With Exercise &Grammar		

.	01 NOV.- 20 NOV.  20 NOV.- Till Exam.	In detail :  Chapter- 17 Chapter- 18 Chapter- 19 With Exercise &Grammar  <b>Revision</b>		



**GOVERNMENT COLLEGE, HANSI LESSON PLAN**

**2023-24**

**CLASS: BSC (NM) (First Semester) NAME OF TEACHER: DR. HONEY SETHI**

**SUBJECT: ENGLISH**

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UNIT S	TIME PERIOD	TOPICS	TESTS AND ASSIGNMENTS	REMARKS
	01 AUG. - 10 SEPT.	Poem-1 Poem-2 Poem -3  With Exercise &Grammar		
	11 SEPT.-05OCT.	Poem -4 Poem -5  With Exercise &Grammar	Assignment 1	
	06 OCT.– 31 OCT.	Poem -6 Poem -7  With Exercise &Grammar	Test	
.	01NOV.-15NOV.  16 NOV-Till Exam.	Poem -8 Poem -9 Poem -10  With Exercise &Grammar	Assignment 2	

		<b>Revision</b>		
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Government College, Hansi.....Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: **Dr. Raj Kumar**

Class: **B.A. 5<sup>th</sup> Semester** Subject: **Geography** Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Definition, Nature, Scope and Approaches of Economic Geography. Relationship of Economic Geography with Economics and Other Branches of Social Sciences. Main Concept of Economic Geography; Resources Concept and Classification; Resource and Conservation.	3 <sup>rd</sup> Week of July to 1 <sup>st</sup> Week of September	1 <sup>st</sup> Assignment
Unit 2	Factors Affecting Location of Economic Activity with special reference to Agriculture (Von Thunen Theory), Industry (Weber's Theory).	2 <sup>nd</sup> Week of September to 3 <sup>rd</sup> Week of September	Class Test
Unit 3	Subsistence and Commercial Agriculture (Rice, Wheat, Cotton, Sugarcane, Tea, Rubber and Coffee). Manufacturing (Cotton Textile, Iron and Steel), Concept of Manufacturing Regions, Special Economic Zones and Technology Parks.	4 <sup>th</sup> Week of September to 2 <sup>nd</sup> Week of October	
Unit 4	World Transportation: Major Trans-Continental Railways and Sea Routes, Geo-Economic Factors in their Development. WTO and International Trade, Patterns and Trends; Major Trade Blocks; Effect of Globalization on Developing Countries.	3 <sup>rd</sup> Week of October to 2 <sup>nd</sup> Week of November	2 <sup>nd</sup> Assignment
Revision	All Four Units	Up to the commencement of examinations	

Government College, Hansi.....Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: **Dr. Raj Kumar**

Class: **B.A. 5<sup>th</sup> Semester** Subject: **Geography** Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Principals of Map Design and Layout. Symbolization: Point, Line and Area Symbols. Lettering and Toponymy. Mechanics of Map Construction.	4 <sup>th</sup> Week of July to 2 <sup>nd</sup> Week of August	.....
Unit 2	Distribution Maps: Qualitative Maps	3 <sup>rd</sup> Week of August to 2 <sup>nd</sup> Week of September	....
Unit 3	Distribution Maps: Quantitative Maps	3 <sup>rd</sup> Week of September to 3 <sup>rd</sup> Week of October	....
Unit 4	Prismatic Compass Survey	4 <sup>th</sup> Week of October to 2 <sup>nd</sup> Week of November	.....

**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: Dharmvir

Class: **B.A. 1<sup>st</sup> Semester**Subject: **Geography**Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	India: Location, relief and drainage systems. Climate, soils, natural vegetation and natural disasters in India.	First Week of August to last Week of August	1 <sup>st</sup> Assignment in the 1st week of September
Unit 3	Energy and Mineral Resources - Coal, Petroleum, Solar, Hydroelectricity and Nuclear Energy. Mineral Resources:- Iron Ore, Manganese, Aluminium and Mica	First Week of September to Last Week of September	-----
Unit 4	Industries - Iron and steel, cotton textile, sugar and industrial regions of India with special reference to Haryana. Transport and communication, Modes of transport:- Road, Railway, Water.	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	Minor Test in the 1 Week of October
Unit 2	Population: Distribution, Density, Growth and Composition. Production and distribution of crops: Rice, wheat, cotton and sugarcane with special reference to Haryana, Green Revolution.	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	2 <sup>nd</sup> Assignment in the 2 <sup>nd</sup> Week of November
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....

**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: Dharmvir

Class: **B.A. 1<sup>st</sup> Semester**

Subject: **Geography**

Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Introduction to Cartography	First Week of August to last Week of August	.....
Unit 2	Maps & Their Types	First Week of September to Last Week of September	....
Unit 3	Map Scales- Methods of Representing Scales, Conversion of Statement of Scale into R.F. and Vice Versa	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	....
Unit 4	Plain Scales, Comparative Scales, Time Scales, Diagonal Scales; Measurement of Distances and Area on Maps & Enlargement and Reduction of Maps	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	.....
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....

**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: Dharmvir

Class: **BCA** Subject: **Geography**Paper: **Environmental Studies**

Unit	Description of chapters/topics	Duration	Assignment/Te st
<b>Unit 1</b>	<p>Multidisciplinary nature of environmental studies: Definition, scope and importance, need for public awareness, Concept, structure and function of ecosystem: producers, consumers and decomposers, Energy flow in the ecosystem</p> <p>Ecological succession, Food chains, Food webs and ecological pyramids, Introduction, characteristics, features, structure and function of different ecosystem such as forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystem. Biodiversity: Introduction, Definition: genetic species and ecosystem diversity, bio-geographical classification of India, Ecosystem &amp; biodiversity services: ecological, economic, social, consumptive use, productive use, social ethical, aesthetic and options values ,Biodiversity at global, national and local level, India as a mega diversity nation Global Hot spot of biodiversity, threats to biodiversity, habit loss, poaching of wildlife, man wildlife conflicts, Biological invasions, Endangered and endemic species of India, Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity</p>	First Week of August to last Week of August	1 <sup>st</sup> assignment in the beginning of first week of January
<b>Unit 2</b>	Renewable and renewable resources, Natural resources and associated problems, Forest resources: Use and over exploitation, deforestation, case studies, Timber extraction, mining dams and their effects on forest and tribal people, Water resources , use and over utilization of surface and ground water, floods, droughts conflicts over water dams benefits and problems, Mineral resources, Use and exploitation, environmental effects of extracting and mineral resources, food resources, World food resources, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-	First Week of September to Last Week of September	Minor test in the first week of February

	pesticide problems, water logging, salinity, Energy resources: Growing energy needs, renewable and renewable energy resources, use of alternate energy resources, case studies, land resources, land as a resources, land degradation, man induced landslides, soil erosion and desertification		
<b>Unit 3</b>	Definition of Environmental Pollution, Causes effect and control measures of: Air Pollution, Water Pollution, soil pollution, noise pollution, Nuclear hazards and human health risks Solid waste management, Causes, effects and control measures of urban and industrial wastes, Pollution case studies, Disaster Management: Floods, Earthquake, Cyclone and landslides, climate changes, global warming, acid rain, ozone layer depletion, different laws related to environment: Environment Protection Act, Air (Prevention and control of pollution) Act, Water (Prevention and control of pollution) Act, Wildlife Protection Act, Forest Conservation Act, International agreement, Montréal and Kyoto Protocol and nature reserve, tribal population and human health	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	2 <sup>nd</sup> Test in the first week of March
<b>Unit 4</b>	Concept of sustainability & sustainable development, water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of project affected persons, case studies, Environmental ethics, role of Indian and other religions and cultures in environmental conservation, Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi) Human Population growth: Impact on environment, human health and welfare, Environmental movements, Chipko, Silent valley, Bishnois of Rajasthan.,	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	.....
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....



**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: Jatin

Class: **B.A. 3rd Semester**Subject: **Geography**Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Weather and Climate; Origin, composition and structure of atmosphere. 2. Insolation, Global heat budget, Horizontal and vertical distribution of temperature, inversion of temperature.	First Week of August to last Week of August	1 <sup>st</sup> Assignment in the 1st week of September
Unit 3	Atmospheric pressure- measurement and distribution, pressure belts, planetary winds, Monsoon, Jet Streams EL NINO- La Nina Phenomenon and Local winds. Humidity-measurement and variables, evaporation, condensation, precipitation types and distribution, hydrological cycle.	First Week of September to Last Week of September	-----
Unit 4	Air masses- concept and classification; Fronts-type and characteristics, Weather disturbances- tropical and extra-tropical cyclones. Climate classification by Koppen; climatic change and global warming.	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	Minor Test in the 1 Week of October
Unit 2	Configuration of oceanic floors and surface relief of Pacific, Atlantic and Indian Oceans; temperature and salinity of oceans. 2. Tides, waves and oceanic currents; circulation in Pacific, Atlantic and Indian Oceans; Oceanic resources.	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	2 <sup>nd</sup> Assignment in the 2 <sup>nd</sup> Week of November
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....

**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: Jatin

Class: **B.A. 3rd Semester**Subject: **Geography**Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Measurement of temperature, rainfall, pressure and humidity.	First Week of August to last Week of August	.....
Unit 2	Representation of temperature and rainfall. (i) Line and Bar Graph - 1 Exercise. (ii) Distribution of temperature (180 therms) 1 Exercise. - (iii) Distribution of rainfall (180 hytes) - 1 Exercise. (iv) Hythergraph - 1 Exercise. (v) Rainfall deviation diagram - 1 Exercise.	First Week of September to Last Week of September	....
Unit 3	Climograph (wet and dry places) - 2 Exercise. Distribution of pressure (180 bars) - 2 Exercise.	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	....
Unit 4	Weather map Interpretation (January & July) - 2 Exercise	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	.....
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....

**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: Jatin

Class: **B.Sc 1<sup>st</sup>** Subject: **Geography**Paper: **Environmental Studies**

Unit	Description of chapters/topics	Duration	Assignment/ Test
<b>Unit 1</b>	<p>Multidisciplinary nature of environmental studies: Definition, scope and importance, need for public awareness, Concept, structure and function of ecosystem: producers, consumers and decomposers, Energy flow in the ecosystem</p> <p>Ecological succession, Food chains, Food webs and ecological pyramids, Introduction, characteristics, features, structure and function of different ecosystem such as forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystem. Biodiversity: Introduction, Definition: genetic species and ecosystem diversity, bio-geographical classification of India, Ecosystem &amp; biodiversity services: ecological, economic, social, consumptive use, productive use, social ethical, aesthetic and options values ,Biodiversity at global, national and local level, India as a mega diversity nation Global Hot spot of biodiversity, threats to biodiversity, habitat loss, poaching of wildlife, man wildlife conflicts, Biological invasions, Endangered and endemic species of India, Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity</p>	First Week of August to last Week of August	1 <sup>st</sup> assignment in the beginning of first week of January
<b>Unit 2</b>	Renewable and renewable resources, Natural resources and associated problems, Forest resources: Use and over exploitation, deforestation, case studies, Timber extraction, mining dams and their effects on forest and tribal people, Water resources , use and over utilization of surface and ground water, floods, droughts conflicts over water dams benefits and problems, Mineral resources, Use and exploitation, environmental effects of extracting and mineral resources, food resources, World food resources, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer- pesticide problems, water logging, salinity, Energy resources: Growing energy needs, renewable and renewable energy resources, use of alternate energy resources,	First Week of September to Last Week of September	Minor test in the first week of February

	case studies, land resources, land as a resources, land degradation, man induced landslides, soil erosion and desertification		
<b>Unit 3</b>	Definition of Environmental Pollution, Causes effect and control measures of: Air Pollution, Water Pollution, soil pollution, noise pollution, Nuclear hazards and human health risks Solid waste management, Causes, effects and control measures of urban and industrial wastes, Pollution case studies, Disaster Management: Floods, Earthquake, Cyclone and landslides, climate changes, global warming, acid rain, ozone layer depletion, different laws related to environment: Environment Protection Act, Air (Prevention and control of pollution) Act, Water (Prevention and control of pollution) Act, Wildlife Protection Act, Forest Conservation Act, International agreement, Montréal and Kyoto Protocol and nature reserve, tribal population and human health	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	2 <sup>nd</sup> Test in the first week of March
<b>Unit 4</b>	Concept of sustainability & sustainable development, water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of project affected persons, case studies, Environmental ethics, role of Indian and other religions and cultures in environmental conservation, Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi) Human Population growth: Impact on environment, human health and welfare, Environmental movements, Chipko, Silent valley, Bishnois of Rajasthan.,	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	.....
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....

**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: **Virender Sihag**Class: **B.A. 3rd Semester**Subject: **Geography**Paper: **Theory**

Unit	Description of Chapters/Topics	Duration	Assignment/Test
Unit 1	Weather and Climate; Origin, composition and structure of atmosphere. 2. Insolation, Global heat budget, Horizontal and vertical distribution of temperature, inversion of temperature.	First Week of August to last Week of August	1 <sup>st</sup> Assignment in the 1 <sup>st</sup> week of September
Unit 3	Atmospheric pressure- measurement and distribution, pressure belts, planetary winds, Monsoon, Jet Streams EL NINO- La Nina Phenomenon and Local winds. Humidity- measurement and variables, evaporation, condensation, precipitation types and distribution, hydrological cycle.	First Week of September to Last Week of September	-----
Unit 4	Air masses- concept and classification; Fronts-type and characteristics, Weather disturbances- tropical and extra-tropical cyclones. Climate classification by Koppen; climatic change and global warming.	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	Minor Test in the 1 Week of October
Unit 2	Configuration of oceanic floors and surface relief of Pacific, Atlantic and Indian Oceans; temperature and salinity of oceans. 2. Tides, waves and oceanic currents; circulation in Pacific, Atlantic and Indian Oceans; Oceanic resources.	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	2 <sup>nd</sup> Assignment in the 2 <sup>nd</sup> Week of November
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....

**Government College, Hansi**  
Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: **Virender Sihag**

Class: **B.A. 3rd Semester**

Subject: **Geography**

Paper: **Practical**

Unit	Description of Chapters/Topics	Duration	Assignment/ Test
Unit 1	Measurement of temperature, rainfall, pressure and humidity.	First Week of August to last Week of August	.....
Unit 2	Representation of temperature and rainfall. (i) Line and Bar Graph - 1 Exercise. (ii) Distribution of temperature (180 therms) 1 Exercise. - (iii) Distribution of rainfall (180 hytes) - 1 Exercise. (iv) Hythergraph - 1 Exercise. (v) Rainfall deviation diagram - 1 Exercise.	First Week of September to Last Week of September	....
Unit 3	Climograph (wet and dry places) - 2 Exercise. Distribution of pressure (180 bars) - 2 Exercise.	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	....
Unit 4	Weather map Interpretation (January & July) - 2 Exercise	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	.....
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....

**Government College, Hansi**

Unit wise Lesson Plan for the Odd Semester, 2023-24

Name of the Teacher: **Virender Sihag**Class: **B.Com 1<sup>st</sup>** Subject: **Environmental Studies** Paper: **Environmental Studies**

Unit	Description of chapters/topics	Duration	Assignment/ Test
<b>Unit 1</b>	<p>Multidisciplinary nature of environmental studies: Definition, scope and importance, need for public awareness, Concept, structure and function of ecosystem: producers, consumers and decomposers, Energy flow in the ecosystem</p> <p>Ecological succession, Food chains, Food webs and ecological pyramids, Introduction, characteristics, features, structure and function of different ecosystem such as forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystem. Biodiversity: Introduction, Definition: genetic species and ecosystem diversity, bio-geographical classification of India, Ecosystem &amp; biodiversity services: ecological, economic, social, consumptive use, productive use, social ethical, aesthetic and options values ,Biodiversity at global, national and local level, India as a mega diversity nation Global Hot spot of biodiversity, threats to biodiversity, habitat loss, poaching of wildlife, man wildlife conflicts, Biological invasions, Endangered and endemic species of India, Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity</p>	First Week of August to last Week of August	1 <sup>st</sup> assignment in the beginning of first week of January
<b>Unit 2</b>	Renewable and renewable resources, Natural resources and associated problems, Forest resources: Use and over exploitation, deforestation, case studies, Timber extraction, mining dams and their effects on forest and tribal people, Water resources , use and over utilization of surface and ground water, floods, droughts conflicts over water dams benefits and problems, Mineral resources, Use and exploitation, environmental effects of extracting and mineral resources, food resources, World food resources, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer- pesticide problems, water logging, salinity, Energy resources: Growing energy needs, renewable and renewable energy resources, use of alternate energy resources,	First Week of September to Last Week of September	Minor test in the first week of February

	case studies, land resources, land as a resources, land degradation, man induced landslides, soil erosion and desertification		
<b>Unit 3</b>	Definition of Environmental Pollution, Causes effect and control measures of: Air Pollution, Water Pollution, soil pollution, noise pollution, Nuclear hazards and human health risks Solid waste management, Causes, effects and control measures of urban and industrial wastes, Pollution case studies, Disaster Management: Floods, Earthquake, Cyclone and landslides, climate changes, global warming, acid rain, ozone layer depletion, different laws related to environment: Environment Protection Act, Air (Prevention and control of pollution) Act, Water (Prevention and control of pollution) Act, Wildlife Protection Act, Forest Conservation Act, International agreement, Montréal and Kyoto Protocol and nature reserve, tribal population and human health	1 <sup>st</sup> Week of October to 3 <sup>rd</sup> Week of October	2 <sup>nd</sup> Test in the first week of March
<b>Unit 4</b>	Concept of sustainability & sustainable development, water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of project affected persons, case studies, Environmental ethics, role of Indian and other religions and cultures in environmental conservation, Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi) Human Population growth: Impact on environment, human health and welfare, Environmental movements, Chipko, Silent valley, Bishnois of Rajasthan.,	4 <sup>th</sup> Week of October to 4 <sup>th</sup> week of November	.....
<b>Revision</b>	Revision, presentation, problem solving	Onwards	.....



**Lesson Plan of Sh. Baljeet Singh, Extension Lecturer of History**  
**B.A IInd Year 3<sup>rd</sup> Sem**  
**Political History of India (1526 -1857 A.D )**

**Unit-I**

1. Establishment of the Mugal Empire: Babur  
2023 4<sup>th</sup> Aug., 2023 to 5<sup>th</sup> Sept.,
2. Sher shah Suri and His Administration :
3. Akbar; Expansion of Empire and religious Policy :
4. Aurangzed; Expansion of Empire and Religious Policy :

**Unit-II**

1. Relation of Mughals with with the Rajputs: 6<sup>th</sup> Sept., 2023 to 30<sup>th</sup> Sept., 2023
2. Deccan Policy of the Mughals:
3. Mughal Administration and Revenue System:
4. Institutions; Mansabdari and Jagirdari:
5. Decline Of the Mughal Empire:

**Unit-III**

1. Rivalry between the French and the British in India: 1<sup>st</sup> Oct., 2023 to 20<sup>th</sup> Nov., 2023
2. Founding of the British Empire; Battels of Plessey & Buxer:
3. Consolidation of the British Empire: Subsidiary Alliance System  
and Doctrine of Lapse; annexation Of Punjab:
4. Uprising of 1857; Cause. Events and Consequences:

**REVISION :**

**21<sup>st</sup> Nov., 2023 to Till Paper starting**

**Lesson Plan of Sh. Baljeet Singh, Extension Lecturer of History**

**B.A. 1<sup>st</sup> Year 1<sup>st</sup> Semester**  
**Ancient India (From Earliest Times to Gupta Age)**  
**(Option –I)**

**Unit-I**

1. Meaning of Scope of History: 4<sup>th</sup> Aug., 2023 to 5<sup>th</sup> Sept., 2023
2. Source of Ancient Indian History
3. Pre-Historic Age: Hunter Gatherers
4. Concept of Neolithic: Origins of Agriculture System
5. Harappan Civilization: Complete Topic:
6. Vedic Culture: Complete Topic:

**Unit-II**

1. Social Institution: Varna Cast, Untouchability 6<sup>th</sup> Sept., 2023 to 30<sup>th</sup> Sept., 2023  
and Gender Relations:
2. Emergence of State: Sixteen Mahajanapadas and  
The Rise of Magadha Empire:
3. Religious Movements: Buddhism and Jainism:

**Unit-III**

1. Mauryan Empire: State Administration and Economy: 1<sup>st</sup> Oct., 2023 to 20<sup>th</sup> Nov., 2023  
Ashoka's Dhamma: Mauryan Art and Architecture:
2. Post- Mauryan Empires: Kushanas and Satvahanas:
3. Gupta Empire: Complete Topic:

**REVISION :**

**21<sup>st</sup> Nov., 2023 to Till Paper starting**

**Lesson Plan of Sh. Kishan Pal, Associate Prof. of History**  
**B.A Hnd Year 3<sup>rd</sup> Sem**  
**Political History of India (1526 -1857 A.D )**

**Unit-I**

- |   |                       |
|---|-----------------------|
| 1.Establishment of the Mugal Empire: Babur              | First week of Aug-23  |
| 2.Sher shah Suri and His Administration :               | Second week of Aug-23 |
| 3.Akbar; Expansion of Empire and religious Policy :     | Third week of Aug -23 |
| 4.Aurangzed; Expansion of Empire and Religious Policy : | Fourth Week of Aug 2  |

**Unit-II**

- |   |                        |
|---|------------------------|
| 1.Relation of Mughals with with the Rajputs : | First week of Sept.-23 |
| 2.Deccan Policy of the Mughals :              | Second week of Sept.23 |
| 3 Mughal Administration and Revenue System :  | Third Week of Sept.23  |
| 4.Institutions; Mansabdari and Jagirdari :    | Fourth Week of Sept.23 |
| 5.Debcline Of the Mughal Empire :             | First Week of Sept.23  |

**Unit-III**

- |   |   |
|---|---|
| 1.Rivalry between the French and the British in India :   | Second Week of Oct.23                             |
| 2.Founding of the British Empire; Battels of Plessey & Buxer :  | Third week of Oct.23                              |
| 3.Consolidation of the British Empire: Subsidiary Alliance System and Doctrine of Lapse; annexation Of Punjab : | Fourth Week of Oct.23                             |
| 4.Uprising of 1857; Cause. Events and Consequences :  | First Week of Nov.23 upto<br>09 <sup>th</sup> Nov |

## **History**

### **B.A. IIIrd Year 5<sup>th</sup> Semester Rise of Modern World (Option –II)**

#### **Unit-I**

- |  |                         |
|--|-------------------------|
| 1. Transition from Feudalism to Capitalism in Europe : | First Week of August-23 |
| 2. Renaissance: Origins, Emergence and Results :       | Second week of Aug-23   |
| 3. Reformation: Origins, Emergence and Results :       | Third week of Aug -23   |

#### **Unit-II**

- |   |                                   |
|---|-----------------------------------|
| 1. Shift of Economic Balance from the Mediterranean Region :                              | Fourth Week of Aug 23 to Atlantic |
| 2. Early Colonial System: Motives, process and Consequences<br>Colonization of Americas : | First week of Sept.-23            |
| 3. Mercantile Revolution: Origins and Results :   | Second week of Sept.23            |

#### **Unit-III**

- |  |                        |
|--|------------------------|
| 1. Scientific Revolution: Origins and Impact :             | Third Week of Sept.23  |
| 2. Glorious Revolution: origins and Results :              | Fourth Week of Sept.23 |
| 3. Industrial Revolution: Origins, Progress and Impact :   | upto 15 Oct.2023       |
| 4. Agricultural Revolution: Origins, progress and Impact : | upto 09 Nov.2023       |

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Amit Kumar

Subject: Advanced Calculus

Class: B.Sc. (NM) -II

Paper: CML 306

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives, Indeterminate forms.	24 July 2023 to 16 Aug. 2023	Test
<b>Unit-2</b>	Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions & implicit functions. Change of variables. Homogenous functions & Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables.	17 Aug. 2023 to 10 September 2023	Assignment
<b>Unit-3</b>	Differentiability of real valued functions of two variables. Schwarz and Young's theorems. Implicit function theorem. Maxima, Minima and saddle points of two variables. Lagrange's method of multipliers.	11 September 2023 to 5 Oct 2023	Test
<b>Unit-4</b>	Jacobians, Beta and Gamma functions, Double and Triple integrals, Dirichlet's integrals, change of order of integration in double integrals..	6 Oct. 2023 to 7 November 2023	Test
<b>Revision</b>		17 November 2023 to till exam	

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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Amit Kumar

Class: B.Sc. (Hons) -II

Subject: Special Function-I

Paper: BML306

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Series solution of differential equations – Power series method, Definitions of Beta and Gamma functions. Bessel equation and its solution: Bessel functions and their properties Convergence, recurrence, Relations and generating functions, Orthogonality of Bessel functions.	24 July 2023 to 10 September 2023	Test
<b>Unit-2</b>	Legendre and Hermite differentials equations and their solutions: Legendre and Hermite functions and their properties-Recurrence Relations and generating functions. Orthogonality of Legendre and Hermite polynomials. Rodrigues' Formula for Legendre & Hermite Polynomials, Laplace Integral Representation of Legendre polynomial.	11 September 2023 to 7 November 2023	Assignment
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Amit Kumar

Class: B.Sc. (NM) -I

Subject: Mathematics Lab-1

Unit	Description of Chapter / Topics	Duration
<b>Unit-1</b>	<p><b>Part A:</b> Introduction to Programming in C  Data types, Operators and expressions, Input / outputs functions. Decisions control structure: Decision statements, Logical and conditional statements, Implementation of Loops-for, while, do while; Switch Statement &amp; Case control structures.</p> <p><b>Part B:</b>  Following Program should be done as Practical:-</p> <ol style="list-style-type: none"> <li>1. Program to interchange the value of two variables.</li> <li>2. Program to calculate compound interest.</li> <li>3. Program for testing a leap year.</li> </ol>	<p>4<sup>th</sup> week of July</p> <p>1<sup>st</sup> week to 3<sup>rd</sup> week of August</p>
<b>Unit-2</b>	<ol style="list-style-type: none"> <li>4. Program to find greatest of three numbers.</li> <li>5. Program to calculate Gross salary of an employee.</li> <li>6. Program to prepare electricity Bill.</li> <li>7. Program to find roots of a quadratic equation.</li> </ol>	<p>4<sup>th</sup> week of August to 3<sup>rd</sup> week of September</p>
<b>Unit-3</b>	<ol style="list-style-type: none"> <li>8. Program to provide output of a given function.</li> <li>9. Program to display table of an input number</li> <li>10. Program to find reverse of a number</li> <li>11. Program to generate Fibonacci series.</li> </ol>	<p>4<sup>th</sup> week of September to 3<sup>rd</sup> week of October</p>
<b>Unit-4</b>	<ol style="list-style-type: none"> <li>12. Program to check whether number is prime or not.</li> <li>13. Program to generate first n prime numbers.</li> </ol>	<p>4<sup>th</sup> Week of October to till Exam</p>

	<p>14. Program to check a number is Armstrong or not.</p> <p>15. Program to convert a number to its binary equivalent.</p>	
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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Amit Kumar

Class: B.A. -I

Subject: Mathematics Lab-1

Unit	Description of Chapter / Topics	Duration
<b>Unit-1</b>	<p><b>Part A:</b> Introduction to Programming in C  Data types, Operators and expressions, Input / outputs functions. Decisions control structure: Decision statements, Logical and conditional statements, Implementation of Loops-for, while, do while; Switch Statement &amp; Case control structures.</p> <p><b>Part B:</b>  Following Program should be done as Practical:-</p> <ol style="list-style-type: none"> <li>1. Program to interchange the value of two variables.</li> <li>2. Program to calculate compound interest.</li> <li>3. Program for testing a leap year.</li> </ol>	<p>4<sup>th</sup> week of July</p> <p>1<sup>st</sup> week to 3<sup>rd</sup> week of August</p>
<b>Unit-2</b>	<ol style="list-style-type: none"> <li>4. Program to find greatest of three numbers.</li> <li>5. Program to calculate Gross salary of an employee.</li> <li>6. Program to prepare electricity Bill.</li> <li>7. Program to find roots of a quadratic equation.</li> </ol>	<p>4<sup>th</sup> week of August to 3<sup>rd</sup> week of September</p>
<b>Unit-3</b>	<ol style="list-style-type: none"> <li>8. Program to provide output of a given function.</li> <li>9. Program to display table of an input number</li> <li>10. Program to find reverse of a number</li> <li>11. Program to generate Fibonacci series.</li> </ol>	<p>4<sup>th</sup> week of September to 3<sup>rd</sup> week of October</p>
<b>Unit-4</b>	<ol style="list-style-type: none"> <li>12. Program to check whether number is prime or not.</li> <li>13. Program to generate first n prime numbers.</li> </ol>	<p>4<sup>th</sup> Week of October to till Exam</p>

	<p>14. Program to check a number is Armstrong or not.</p> <p>15. Program to convert a number to its binary equivalent.</p>	
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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Amit Kumar

Class: B.Sc. -II

Subject: Mathematics Lab-III

Unit	Description of Chapter / Topics	Duration
<b>Unit-1</b>	1.Programmer's model of a computer, Algorithms, Flow charts, Data types,  2.Operators and expressions, Input / Output functions.	4 <sup>th</sup> week of July  1 <sup>st</sup> week to 3 <sup>rd</sup> week of August
<b>Unit-2</b>	1.Decisions control structure: Decision statements, 2.Logical and conditional statements, Implementation of Loops, 3.Switch Statement & Case control structures. 4.Functions, Preprocessors and Arrays.	4 <sup>th</sup> week of August to 3 <sup>rd</sup> week of September
<b>Unit-3</b>	1.Strings: Character Data Type, Standard String handling Functions, Arithmetic Operations on Characters.  2.Structures: Definition, using Structures, use of Structures in Arrays and Arrays in Structures. Pointers: 3.Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method, 4.Newton-Raphson's method.  Newton's iterative method for finding pth root of a number	4 <sup>th</sup> week of September to 3 <sup>rd</sup> week of October
<b>Unit-4</b>	Newton Forward Interpolation Method  Newton Backward Interpolation Method  Gauss Forward Interpolation Method	4 <sup>th</sup> Week of October to till Exam

	Gauss Backward Interpolation Method	
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**CLASS: B.Sc./B.A.-I Year I Sem(2023-24) NAME OF PAPER -**

**CALCULUS PAPER CODE - CML-107, BAMH-B.Sc**

**Teacher-Ankur Bala**

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	1. $\epsilon$ - $\delta$ definition of the limit of a function, Basic properties of limits, 2. Continuous functions and classification of discontinuities. 3. Successive differentiation. 4. Leibnitz theorem, Maclaurin and Taylor series expansions.
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	1. Asymptotes in Cartesian coordinates, Intersection of curve and its asymptotes..Asymptotes in polar coordinates, 2. Curvature, Radius of curvature for Cartesian curves, parametric curves, polar curves, 3. Tests for concavity and convexity, singular points, 4. ., Point of inflexion, Multiple points, Cusps, nodes and conjugate points, species of cusps
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	<b>1.</b> Tracing of curves in Cartesian, parametric and polar co-ordinates. <b>2.</b> Reduction formulae, .Derivation of Reduction formulae by connecting with other integral. <b>3.</b> Rectification. <b>4.</b> Length of curve in Cartesian, Parametric and polar curves.
<b>4.</b>	<b>November</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b>	<b>1.</b> Quadrature(area) Sectorial area. <b>2.</b> Area bounded by closed curves.Area enclosed by curves in polar form. <b>3.</b> .Volumes and Surfaces of solids of revolution. <b>4.</b> Volume bounded between two solids.

**CLASS: B.Sc.-II(2023-24) III Sem**

**NAME OF PAPER – NUMERICAL ANALYSIS**

**PAPER CODE - CML-307**

**Teacher-Ankur Bala**

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b>  <b>2<sup>nd</sup> week</b>  <b>3<sup>rd</sup> week</b>  <b>Last week</b>	1. Finite Difference operators and their relations, difference table, finding the missing terms and effect of error in a difference tabular values, 2. Interpolation with equal intervals: derivations of Newton's forward and Newton's backward interpolation formulae and their applications, 3. Interpolation with unequal intervals: derivations of Newton's divided difference & 4. Lagrange's Interpolation formulae and their applications.
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b>  <b>2<sup>nd</sup> week</b>  <b>3<sup>rd</sup> week</b>  <b>Last week</b>	1. Central Difference interpolation formulae: derivations of Gauss's forward and Gauss's backward interpolation formulae, Sterling, Bessel formulae and their applications. 2. Numerical Differentiation: Relation between difference operator and derivative operator, 3. Derivative of a function using interpolation formulae (as studied in Sections – I & II). 4. Numerical Integration: Newton-Cote's Quadrature formula, Trapezoidal rule, Simpson's one-third rule and Simpson's three-eighths rule, Chebychev formula, Gauss Quadrature formula.
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b>  <b>2<sup>nd</sup> week</b>  <b>3<sup>rd</sup> week</b>  <b>Last week</b>	1. Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method, Newton-Raphson's method, 2. Newton's iterative method for finding pth root of a number. 3. Simultaneous linear algebraic equations: Gauss-elimination method, Gauss-Jordan method, triangularization method (LU decomposition method). 4. Iterative method, Jacobi's method, Gauss-Seidal's method, Relaxation method.

4.	November	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last</b> <b>week</b>	Eigen Value Problems: Power method, Jacobi's method, Given's method, House-Holder's method. Numerical solution of ordinary differential equations: Single step methods- Picard's method. Taylor's series method, Euler's method, Modified Euler's method, Runge-Kutta Methods. Multiple step methods; Predictor-corrector method, Milne-Simpson's method
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**CLASS: B.Sc.-III(2023-24)**

**NAME OF PAPER – NUMBER THEORY AND TRIGONOMETRY**

**PAPER CODE (for B.Sc.) - CML-508(i)**

**Teacher-Ankur**

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	1.Linear Diophantine equation, prime counting function, 2.statement of prime number theorem, Goldbach conjecture, 3 linear congruences, complete set of residues, 4.Chinese remainder theorem, Fermat's little theorem, Wilson's theorem
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	1.Number theoretic functions, sum and number of divisors, totally multiplicative functions, 2.the Möbius inversion formula, the greatest integer function, 3.Euler's phi-function, Euler's theorem, 4.reduced set of residues, some properties of Euler's phi-function.
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	1. Order of an integer modulo n, primitive roots for primes, 2.composite numbers having primitive roots, Euler's criterion, 3.the Legendre symbol and its properties, quadratic reciprocity, 4.quadratic congruences with composite moduli.
<b>4.</b>	<b>November</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	1.Exponential, Logarithmic, Circular functions; $\sin(nx)$ , $\cos(nx)$ , $\tan(nx)$ , $\sin nx$ , $\cos nx$ , $\tan nx$ , 2.hyperbolic and inverse hyperbolic functions - simple problems. Gregory's series, 3.Summation of Trigonometric series, 4. Trigonometric expansions of sine and cosine as infinite products (without proof).



**CLASS: B.Com. -I (2023-24)**  
**NAME OF PAPER – BUSSINESS MATHEMATICS**

**PAPER CODE – BC-105**

**Teacher-Ankur Bala**

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b>  <b>2<sup>nd</sup> week</b>  <b>3<sup>rd</sup> week</b>  <b>Last week</b>	<b>1.</b> Matrices and Determinants: concept of matrix, types, and algebra of matrices; properties of determinants; <b>2.</b> calculation of values of determinants up to third order, adjoint of a matrix, elementary row or column operations; <b>3.</b> Finding inverse of a matrix through adjoint and elementary row or column operations; <b>4.</b> solution of a system of linear equations having unique solution and involving not more than three variables.
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b>  <b>3<sup>rd</sup> week &amp; Last week</b>	<b>1.</b> Linear inequalities: <b>2.</b> graphical solution of linear inequalities in two variables, <b>3.</b> solution of system of linear inequalities in two variables.
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b>  <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b>  <b>Last week</b>	<b>1.</b> Linear programming- formulation of equation: <b>2.</b> graphical method of solution; <b>3.</b> problems relating to two variables including the case of mixed constraints; cases having no solution, <b>4.</b> multiple solutions, unbounded solution and redundant constraints.
<b>4.</b>	<b>November</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	<b>1.</b> Logarithms and <b>2.</b> Anti-logarithms, <b>3.</b> Permutations and <b>4.</b> Combinations.

Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher : Mr. Dhanesh kumar

Class: B.Sc 2<sup>nd</sup> (H) 3<sup>rd</sup> semester

Semester: 3

Subject: Mathematics

Paper: Advanced Calculus

Subject:Unit 1	Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives, Indeterminate forms.	24-07-2023 to 16-08-2023	Verbly test
Unit 2	Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions & implicit functions. Change of variables. Homogenous functions & Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables.	17-08-2023 to 10-09-2023	Ist Assignment in 2 <sup>nd</sup> week of august
Unit 3	Differentiability of real valued functions of two variables. Schwarz and Young's theorem. Implicit function theorem. Maxima, Minima and saddle points of two variables. Lagrange's method of multipliers.	11-09-2023 to 05-10-2023	Minor test in the last week of september
Unit 4	Curves: Tangents, Principal normals, Binormals, Serret-Frenet formulae. Locus of the centre of curvature, Spherical curvature, Locus of centre of Spherical curvature, Involute, evolutes, Bertrand Curves. Surfaces: Tangent planes, one parameter family of surfaces, Envelopes.	06-10-2023 to 07-11-2023	2 <sup>nd</sup> Assignement in the last week of October

Revision		17-11-2023 to till Exam	
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## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher Mr. Dhanesh kumar

class : **B.Sc 1st (H) Semester**

Subject: **Agebra**

Paper : **BM-111**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Symmetric, skew symmetric, hermitian and skew hermitian matrices, elementary operation on matrices. Rank of matrix, inverse of matrix, linear dependence and independence of rows and columns of matrices, row rank and column rank of matrices, eigen values, eigen vectors and characteristic equation of matrix, minimal polynomial of matrix, Cayley Hamilton theorem and its use to finding inverse	24-07-2023 to 16-08-2023	Verbal test
Unit 2	Application of matrices to a system of linear equation, theorem of consistency of a system of linear equation, unitary and orthogonal matrices, bilinear and quadratic forms.	17-08-2023 to 10-09-2023	
Unit 3	Relations between roots and coefficients of general polynomial equation in one variable, solution of polynomial equations having condition of roots. Transformation of equations, common roots and multiple roots.	11-09-2023 to 05-10-2023	1st Assignment in last week of September
Unit 4	Nature of roots of an equation. Descartes rule of sign, solution of cubic equation, biquadratic equations and their solutions.	06-10-2023 to 07-11-2023	2 <sup>nd</sup> Assignment in the last week of November
Revision		17-11-2023 to till Exam	

## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher Mr. Dhanesh kumar

class : **B.Sc (H) 3<sup>rd</sup> Semester**

Subject: Ordinary Differential Equation

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Exact Differential Equations . Equations of First Order but not of First Degree	24-07-2023 to 16-08-2023	Verbly test
Unit 2	Exact Differential Equations . Equations of First Order but not of First Degree	17-08-2023 to 10-09-2023	
Unit 3	Homogenous Linear Equations . Linear Differential Equations of Second order	11-09-2023 to 05-10-2023	Ist Assignment inlast week of september
Unit 4	Ordinary Simultaneous Differential Equations. Total Differential Equations	06-10-2023 to 07-11-2023	2 <sup>nd</sup> Assignement in the last week of november
Revision		17-11-2023 to till Exam	

## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher Mr. Dhanesh kumar

class : **B.Sc (H) 5<sup>th</sup> Semester**

Subject: **Sequences and Series**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Set, Finite set, Infinite Set, Boundedness g.l.b, l.u.b, examples Neighbourhood of a point, Examples, open sets Interior point of a set, isolated point Limit point of a set, examples Thorems related to limit points, Derived set and related results	24-07-2023 to 16-08-2023	Verbly test
Unit 2	Properties of limit points, Closed sets, closure of a set and related results Examples , B.W.T and compactness B.W.T related results and examples Open Cover , Heine Borel Theorm Definition of sequence, examples, type of sequences, real sequennce , to find general term of sequence , range of sequ Convergence and divergence of a sequence, related results, examples Bounded sequences, Monotone sequences Monotone convergence theorems, Cauchy sequence, Cauchy Criterion , Examples and problems	17-08-2023 to 10-09-2023	
Unit 3	Comparison Test- I, II Problems and solution and application Cauchy Test for series and related results and problems Geomertics series test problems and solution Harmonic series and p-test , related problems and solution exercise Ratio test - Problems and solutions Raabe's Test- Problems and solutions Logrithmic Test- Problems and solutions Demorgan and Bertrand Test- Problems and solutions	11-09-2023 to 05-10-2023	Ist Assignment inlast week of september
Unit 4	Cauchy Root test - Problems and solutions Guass Test- Problems and solutions Integral Test- Problems and solutions Condensation Test- Problems and solutions Alternate series- definition , Examples Leibnitz Test- Problems and solutions Absolute Convergence- Problems and	06-10-2023 to 07-11-2023	2 <sup>nd</sup> Assignement in the last week of november

	solutions Arbitrary Series- Definition and examples Abel's lemma- Problems and solutions Dirichlet' test- Problems and solutions Test for convergence of rearrangement of series- Riemann test Multiplication of series, Cauchy product of series, convergence of infinite product Absolute Convergence of infinite products- Problems and solutions		
Revision		17-11-23 to till Exam	

## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-2024

B.A. 2nd

Name of Teacher : Sandeep kumar

Semester: 3.

Subject: Mathematics

Paper: Numerical analysis

Class : <b>B.A.</b> <b>3<sup>rd</sup>Semester</b> Subject:Unit 1	Finite Differences operators and their relations. Finding the missing terms and effect of error in a difference tabular values, Interpolation with equal intervals: Newton's forward and Newton's backward interpolation formulae. Interpolation with unequal intervals: Newton's divided difference, Lagrange's Interpolation formulae, Hermite Formula.	2 <sup>rd</sup> week of august to 4 <sup>th</sup> week of August 2023	Verbly test
Unit 2	Central Differences: Gauss forward and Gauss's backward interpolation formulae, Sterling, Bessel Formula.  Probability distribution of random variables, Binomial distribution, Poisson's distribution, Normal distribution: Mean, Variance and Fitting.	4 <sup>st</sup> week of August to 2 <sup>nd</sup> week of September 2023	
Unit 3	Numerical Differentiation: Derivative of a function using interpolation formulae as studied in Sections –I & II.  Eigen Value Problems: Power method, Jacobi's method, Given's method, House-	3 <sup>rd</sup> week of september to 1 <sup>st</sup> week of octomber 2023	



	<p>Holder's method, QR method, Lanczos method.</p> <p>SECTION-I</p>		
Unit 4	<p>Numerical Integration: Newton-Cote's Quadrature formula, Trapezoidal rule, Simpson's</p> <p>one- third and three-eighth rule, Chebychev formula, Gauss Quadrature formula.</p> <p>Numerical solution of ordinary differential equations: Single step methods-</p> <p>Picard's method. Taylor's series method, Euler's method, Runge-Kutta Methods.</p> <p>Multiple step methods; Predictor-corrector method, Modified Euler's method,</p> <p>Milne-Simpson's method.</p>	2 <sup>nd</sup> week of october to 4 <sup>th</sup> week of october	<p>1<sup>st</sup> Assignment in the last Week of september</p> <p>Minor test in the last week of october</p>
Revision		november	

## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher Mr. Sandeep Kumar

class : **B.Sc 1st Semester**

Subject: **Agebra**

Paper : **BM-111**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Symmetric, skew symmetric, hermitian and skew hermitian matrices, elementary operation on matrices. Rank of matrix, inverse of matrix, linear dependence and independence of rows and columns of matrices, row rank and column rank of matrices, eigen values, eigen vectors and characteristic equation of matrix, minimal polynomial of matrix, Cayley Hamilton theorem and its use to finding inverse	2 <sup>nd</sup> week of August to 4 <sup>th</sup> week of August 2023	Verbal test
Unit 2	Application of matrices to a system of linear equation, theorem of consistency of a system of linear equation, unitary and orthogonal matrices, bilinear and quadratic forms.	4 <sup>th</sup> week of August to 2 <sup>nd</sup> week of September 2023	
Unit 3	Relations between roots and coefficients of general polynomial equation in one variable, solution of polynomial equations having condition of roots. Transformation of equations, common roots and multiple roots.	3 <sup>rd</sup> week of September to 1 <sup>st</sup> week of October 2023	1 <sup>st</sup> Assignment in last week of August
Unit 4	Nature of roots of an equation. Descartes rule of sign, solution of cubic equation, quadratic equations and their solutions.	2 <sup>nd</sup> week of October to 4 <sup>th</sup> week of October	2 <sup>nd</sup> Assignment in the last week of September  Test last week of October
Revision		November	

## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2023-24

Name of Teacher Mr. Sandeep Kumar

class : **B.A. 1st Semester**

Subject: **Agebra**

Paper : **BM-111**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Symmetric, skew symmetric, hermitian and skew hermitian matrices, elementary operation on matrices. Rank of matrix, inverse of matrix, linear dependence and independence of rows and columns of matrices, row rank and column rank of matrices, eigen values, eigen vectors and characteristic equation of matrix, minimal polynomial of matrix, Cayley Hamilton theorem and its use to finding inverse	2 <sup>nd</sup> week of August to 4 <sup>th</sup> week of August 2023	Verbal test
Unit 2	Application of matrices to a system of linear equation, theorem of consistency of a system of linear equation, unitary and orthogonal matrices, bilinear and quadratic forms.	4 <sup>th</sup> week of August to 2 <sup>nd</sup> week of September 2023	
Unit 3	Relations between roots and coefficients of general polynomial equation in one variable, solution of polynomial equations having condition of roots. Transformation of equations, common roots and multiple roots.	3 <sup>rd</sup> week of September to 1 <sup>st</sup> week of October 2023	1 <sup>st</sup> Assignment in last week of August
Unit 4	Nature of roots of an equation. Descartes rule of sign, solution of cubic equation, quadratic equations and their solutions.	2 <sup>nd</sup> week of October to 4 <sup>th</sup> week of October	2 <sup>nd</sup> Assignment in the last week of September  Test in last week of October
Revision		November	

## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Sandeep Kumar

class : **B.A. 5<sup>th</sup> Semester**

Subject: **Sequences and Series**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Set, Finite set, Infinite Set, Boundedness g.l.b, l.u.b, examples Neighbourhood of a point, Examples, open sets Interior point of a set, isolated point Limit point of a set, examples Theorems related to limit points, Derived set and related results .Properties of limit points, Closed sets, closure of a set and related results Examples , B.W.T and compactness B.W.T related results and examples Open Cover , Heine Borel Theorm Definition of sequence, examples, type of sequences, real sequennce , to find general term of sequece , range of sequ Convergence and divergence of a sequece, related results, examples Bounded sequences, Monotone sequeces Monotone convergence theorems, Cauchy sequece, Cauchy Criterion , Examples and problems	2 <sup>rd</sup> week of august to  4 <sup>th</sup> week of August 2023	Verbly test
Unit 2	Infinite series : Comparison Test-1, II Problems and solution and application Cauchy Test for series and related results and problems Geomertics series test problems and solution Harmonic series and p-test , related problems and solution exercise Ratio test - Problems and solutions Raabe's Test- Problems and solutions Logrithmic Test- Problems and solutions Demorgan and Bertrand Test- Problems and solutions	4 <sup>st</sup> week of August to 2 <sup>nd</sup> week of September 2023	
Unit 3	Fourier's series: Fourier expansion of piecewise monotonic functions, Properties of Fourier Co-efficients, Dirichlet's conditions, Parseval's identity for Fourier series, Fourier	3 <sup>rd</sup> week of september to Ist week of octomber 2023	Ist Assignment in last week of August

	series for even and odd functions, Half range series, Change of Intervals.		
Unit 4	Riemann integral, Integrability of continuous and monotonic functions, The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.	2 <sup>nd</sup> week of october to 4 <sup>th</sup> week of october	2 <sup>nd</sup> Assignment in the last week of September Test in last week of october
Revision		November	

## Government College Hansi

Unit wise Lesson Plan for Odd Semester, 2022-23

Name of Teacher Mr. Sandeep kumar

class : **B.Sc (H) 5<sup>th</sup> Semester**

Subject: **Sequences and Series**

Unit	Description of Chapter/Topic	Duration	Assignment/Test
Unit 1	Set, Finite set, Infinite Set, Boundedness g.l.b, l.u.b, examples Neighbourhood of a point, Examples, open sets Interior point of a set, isolated point Limit point of a set, examples Theorems related to limit points, Derived set and related results .Properties of limit points, Closed sets, closure of a set and related results Examples , B.W.T and compactness B.W.T related results and examples Open Cover , Heine Borel Theorem	2 <sup>nd</sup> week of august to  4 <sup>th</sup> week of August 2023	Verbly test
Unit 2	Definition of sequence, examples, type of sequences, real sequennce , to find general term of sequnce , range of sequ Convergence and divergence of a sequce, related results, examples Bounded sequences, Monotone sequences Monotone convergence theorems, Cauchy sequce, Cauchy Criterion , Examples and problems Comparison Test-1, II Problems and solution and application Cauchy Test for series and related results and problems Geomertics series test problems and solution Harmonic series and p-test	4 <sup>st</sup> week of August to 2 <sup>nd</sup> week of September 2023	
Unit 3	Infinite Series:-related problems and solution exercise Ratio test - Problems	4th week of September to	Ist Assignment in last week of August

	and solutions Raabe's Test- Problems and solutions Logarithmic Test- Problems and solutions Demorgan and Bertrand Test- Problems and solutions Cauchy Root test - Problems and solutions Gauss Test- Problems and solutions Integral Test- Problems and solutions Condensation Test Problems and solutions	4th week of October 3rd week of september to 1st week of october 2023	
Unit 4	Alternate series- definition , Examples Leibnitz Test- Problems and solutions Absolute Convergence- Problems and solutions Arbitrary Series- Definition and examples Abel's lemma- Problems and solutions Dirichlet' test- Problems and solutions Test for convergence of rearrangement of series- Riemann test Multiplication of series, Cauchy product of series, convergence of infinite product Absolute Convergence of infinite products- Problems and solutions	2 <sup>nd</sup> week of october to 4 <sup>th</sup> week of october	2 <sup>nd</sup> Assignement in the last week of September  Test in November
Revision		November	

## Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2023-24

**Department:Mathematics**

Name of Teacher:Manish Gautam

Class:B.Sc. 2 hors.

Subject:Mathematics

Paper:Mathematical Statistics

Unit	Description of Chapter / Topics	Months	Assignment / Test
Unit-1	Measures of Central Tendency and Location: Mean, median, mode, geometric mean, harmonic mean, partition values.  Measures of Dispersion: Absolute and relative measures of range, quartile deviation, mean deviation, standard deviation ( $\sigma$ ), coefficient of variation.	1 Month	

<b>Unit-2</b>	<p>Measures of Central Tendency and Location: Mean, median, mode, geometric mean, harmonic mean, partition values.</p> <p>Measures of Dispersion: Absolute and relative measures of range, quartile deviation, mean deviation, standard deviation (<math>\sigma</math>), coefficient of variation.</p>	2 Month	
<b>Unit-3</b>	<p>Basic concepts in Probability, Bayes' theorem and its applications.</p> <p>Random Variable and Probability Functions: Definition and properties of random variables, discrete and continuous random variable, probability mass and density functions, distribution function.</p>	3 Month	



<b>Unit-4</b>	<p>Correlation for Bivariate Data: Concept and types of correlation, Scatter diagram, Karl</p> <p>Pearson Coefficient (r) of correlation and rank correlation coefficient.</p> <p>Linear Regression: Concept of regression, principle of least squares and fitting of straight line, derivation of two lines of regression, properties of regression coefficients, standard error</p> <p>of estimate obtained from regression line, correlation coefficient between observed and estimated values. Angle between two lines of regression. Difference between correlation and regression.</p>	4 Month	02/11/2023

## Lesson Plan

Government College, Hansi

Unit wise Lesson Plan for Odd Semester 2023-24

**Department:Mathematics**

Name of Teacher:Manish Gautam

Class:B.C.A. 1 YEAR

Subject:Mathematics

Paper:Mathematical Foundation

Unit	Description of Chapter / Topics	Months	Assignment / Test
Unit-1	Set, Subsets and operations on sets, Venn Diagram of Sets, Power set of a set.  Equivalence relation on a set and partition of a set, Partially ordered sets. Boolean Algebra (definition and examples)	1 month	
Unit-3		3 month	30/10/2023

	<p>Addition and multiplication of matrices, Laws of matrix algebra, Singular and non-singular matrices,</p> <p>Inverse of a matrix, Rank of a matrix, Rank of the Product of two matrices, System of Linear equations</p> <p>i.e. <math>AX=0</math> and <math>AX=B</math></p>		
<b>Unit-4</b>	<p>Characteristic equations of a square matrix, Cayley-Hamilton Theorem, Eigenvalues and eigenvectors,</p>	4 month	

	Eigenvalues and eigenvectors of symmetric skew symmetric, Hermitian and skew- Hermitan matrices.		

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Manish Gautam

Class: B.Sc.III Non medical.

Subject: Mathematics

Paper: Groups and Rings

Unit	Description of Chapter / Topics	Months	Assignment / Test
<b>Unit-1</b>	Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Lagrange's theorem and its consequences, Normal subgroups, Quotient groups	1 Month	
<b>Unit-2</b>	Homeomorphisms, isomorphisms, automorphisms and inner automorphisms of a group. Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating	2 Month	

	groups, Cayley's theorem, Center of a group and derived group of a group.		
<b>Unit-3</b>	Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principal, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.	3 Month	27/10/2023
<b>Unit-4</b>	Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is $R[X_1, X_2, \dots, X_n]$	4 Month	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Manish Gautam

Class: B.A.3rd year

Subject: Mathematics

Paper: Groups and Rings

Unit	Description of Chapter / Topics	Months	Assignment / Test
<b>Unit-1</b>	Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Lagrange's theorem and its consequences, Normal subgroups, Quotient groups	1 month	
<b>Unit-2</b>	Homeomorphisms, isomorphisms, automorphisms and inner automorphisms of a group. Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating groups, Cayley's theorem, Center of a group and derived group of a group.	2 Month	
<b>Unit-3</b>	Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principal, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.	3 Month	28/10/2023

<b>Unit-4</b>	Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is $R[X_1, X_2, \dots, X_n]$	4 Month	

**CLASS: B.A.-II Year ( III Sem)(2023-24) NAME**  
**OF PAPER – ADVANCE CALCULUSPAPER**  
**CODE – BAMH-201**  
**Teacher-Privanka**

<b>SR. NO.</b>	<b>MONTHS</b>	<b>PERIOD</b>	<b>TOPICS</b>
<b>1.</b>	<b>August</b>	<b>1<sup>st</sup> week</b>	<ol style="list-style-type: none"> <li>1. Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability.</li> <li>2. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations.</li> <li>3. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives,</li> <li>4. Indeterminate forms.</li> </ol>
		<b>2<sup>nd</sup> week</b>	
		<b>3<sup>rd</sup> week</b>	
		<b>Last week</b>	
<b>2.</b>	<b>September</b>	<b>1<sup>st</sup> week</b>	<ol style="list-style-type: none"> <li>1. Limit and continuity of real valued functions of two variables. Partial differentiation.</li> <li>2. Total Differentials; Composite functions &amp; implicit functions.</li> <li>3. Change of variables. Homogenous functions &amp; Euler's theorem on homogeneous functions.</li> <li>4. Taylor's theorem for functions of two variables</li> </ol>
		<b>2<sup>nd</sup> week</b>	
		<b>3<sup>rd</sup> week</b>	
		<b>Last week</b>	
<b>3.</b>	<b>October</b>	<b>1<sup>st</sup> week</b>	<ol style="list-style-type: none"> <li>1. Differentiability of real valued functions of two variables.</li> <li>2. Schwarz and Young's theorems. Implicit function theorem.</li> <li>3. Maxima, Minima and saddle points of two variables.</li> <li>4. Lagrange's method of multipliers</li> </ol>
		<b>2<sup>nd</sup> week</b>	
		<b>3<sup>rd</sup> week</b>	
		<b>Last week</b>	



<b>4.</b>	<b>November</b>	<b>1<sup>st</sup> week</b> <b>2<sup>nd</sup> week</b> <b>3<sup>rd</sup> week</b> <b>Last week</b>	<b>1.</b> Jacobians, Beta and Gama functions, <b>2.</b> Double and Triple integrals, <b>3.</b> Dirichlets integrals, <b>4.</b> change of order of integration in double integrals..
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CLASS: B.Sc.- III (V Sem)( 2023-24) NAME OF PAPER – SEQUENCE AND SERIES  
PAPER CODE - CML-507(i)  
Teacher-Privanka

SR. NO.	MONTHS	PERIOD	TOPICS
1.	August	1 <sup>st</sup> week  2 <sup>nd</sup> week 3 <sup>rd</sup> week Last week	1.Boundedness of the set of real numbers; least upper bound, greatest lower bound of a set, neighborhoods, interior points, isolated points,  2.limit points, open sets, closed set, interior of a set, closure of a set in real numbers and their properties. 3.Sequence: Real Sequences and their convergence, Theorem on limits of sequence, Bounded and monotonic sequences 4.Cauchy's sequence, Cauchy general principle of convergence, sub sequence, subsequential limits.
2.	September	1 <sup>st</sup> week  2 <sup>nd</sup> week  3 <sup>rd</sup> week Last week	1.Infinite series: Convergence and divergence of Infinite Series, Comparison Tests of positive terms Infinite series, 2Cauchy's general principle of Convergence of series, Convergence and divergence of geometric series. 3.Hyper Harmonic series or p-series.Infinite series: D-Alembert's ratio test, Raabe's test, Logarithmic test, 4.Cauchy's Nth root test, Gauss Test, Cauchy's Integral test, Cauchy's condensation test. Alternating series: Leibnitz's test, absolute and conditional convergence. Arbitrary series: Abel's lemma, Abel's test, Dirichlet's test.
3.	October	1 <sup>st</sup> week  2 <sup>nd</sup> week 3 <sup>rd</sup> week Last week	1.Fourier's series: Fourier expansion of piecewise monotonic functions. 2.Properties of Fourier Co-efficients, Dirichlet's conditions. 3. Parseval's identity for Fourier series. 4.Fourier series for even and odd functions, Half range series, Change of Intervals.
4.	November	1 <sup>st</sup> week  2 <sup>nd</sup> week	1Riemann integral: Definition and examples. Darboux's Theorem and condition of existence of Riemann's integral. 2.Integrability of continuous, monotonic functions and discontinuous functions. Properties of integrable functions. 3.Continuity and differentiability of integrable functions. Primitive. 4.The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.

		<b>3<sup>rd</sup></b> <b>week</b> <b>Last week</b>	
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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Dr. Rahmaan Khan

Class: B.Sc.III (H)

Subject: Mathematics

Paper: Operation Research -II

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Inventory Control: introduction of inventory, factors affecting inventory, Inventory models, Deterministic models: Economic order quantity model when shortages are allowed/not allowed, price discounts model, multi-item inventory models.	24-07-2023 to 16-08-2023	
<b>Unit-2</b>	Queuing Theory : Basic characteristics of queuing system, Birth-death equations, Steady state solution of Markovian queuing models with single and multiple servers with infinite capacity (M/M/1 and M/M/c), and with limited capacity (M/M/1/K and M/M/c/K).	17-08-2023 to 10-09-2023	
<b>Unit-3</b>	Sequencing problems: Processing of n jobs through 2 machines, n jobs through 3 machines, 2 jobs through m machines, n jobs through m machines. Replacement problems: Replacement of items whose running cost increases with time, Replacement policies for the items that fail completely – Individual and the group replacement policies.	11-09-2023 to 05-10-2023	
<b>Unit-4</b>	PERT and CPM: Introduction of PERT and CPM, Earliest and latest times, Determination of critical path and various types of floats, Probabilistic and cost considerations in project scheduling	06-10-2023 to 07-11-2023	

<b>Revision</b>	Revision of the Syllabus	17-11-2023 to Exam	
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**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Dr. Rahmaan Khan

Class: B.A.III

Subject: Mathematics

Paper: Number Theory and Trigonometry

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Statement of Prime Number Theorem, Prime Counting Function, Complete set of residues, Linear Congruence, Fermat's theorem. Wilson's theorem, Chinese Remainder Theorem. Linear Diophantine equations.	24-07-2023 to 16-08-2023	
<b>Unit-2</b>	Number Theoretic function, Euler's $\phi$ function, Some theorems on Euler's function, totally multiplicative function, Greatest integer function $[x]$ . The number of divisors and the sum of divisors of a natural number $n$ (The functions $d(n)$ and $\sigma(n)$ ). Moebius function and Moebius inversion formula.	17-08-2023 to 10-09-2023	
<b>Unit-3</b>	Order of an integer modulo $n$ , primitive roots for primes, Composite numbers having primitive	11-09-2023 to 05-10-2023	

	roots, Euler's criterion, Quadratic reciprocity, Quadratic congruences with composite moduli.		
<b>Unit-4</b>	Exponential, Logarithmic, Circular functions; $\sin(nx)$ , $\cos(nx)$ , $\tan(nx)$ , $\sin^n(x)$ , $\cos^n(x)$ , $\tan^n(x)$ , Hyperbolic functions and Inverse Hyperbolic functions: simple problems, Trigonometric functions of sine and cosine as infinite products (without proof).	06-10-2023 to 07-11-2023	
<b>Revision</b>	Revision of the Syllabus	17-11-2023 to Exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Dr. Rahmaan Khan

Class: B.Sc.II (H)

Subject: Mathematics

Paper: Number Theory and Trigonometry

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Divisibility, G.C.D.(greatest common divisors), L.C.M.(least common multiple) Primes, Fundamental Theorem of Arithmetic. Linear Congruences, Fermat's theorem. Wilson's theorem and its converse. Linear Diophantine equations in two variables	24-07-2023 to 16-08-2023	
<b>Unit-2</b>	Complete residue system and reduced residue system modulo m. Euler's $\phi$ function Euler's generalization of Fermat's theorem. Chinese Remainder Theorem. Quadratic residues. Legendre symbols. Lemma of Gauss; Gauss reciprocity law. Greatest integer function $[x]$ . The number of divisors and the sum of divisors of a natural number n (The functions $d(n)$ and	17-08-2023 to 10-09-2023	

	$\phi(n)$ . Moebius function and Moebius inversion formula.		
<b>Unit-3</b>	De Moivre's Theorem and its Applications. Expansion of trigonometrical functions. Direct circular and hyperbolic functions and their properties.	11-09-2023 to 05-10-2023	
<b>Unit-4</b>	Inverse circular and hyperbolic functions and their properties. Logarithm of a complex quantity. Gregory's series. Summation of Trigonometry series.	06-10-2023 to 07-11-2023	
<b>Revision</b>	Revision of the Syllabus	17-11-2023 to Exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Dr. Rahmaan Khan

Class: B.Sc.III (H)

Subject: Mathematics

Paper: Groups and Rings

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Lagrange's theorem and its consequences, Normal subgroups, Quotient groups	24-07-2023 to 16-08-2023	

<b>Unit-2</b>	<p>Homeomorphisms, isomorphisms, automorphisms and inner automorphisms of a group.</p> <p>Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating groups, Cayley's theorem, Center of a group and derived group of a group.</p>	<p>17-08-2023 to</p> <p>10-09-2023</p>	
<b>Unit-3</b>	<p>Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principal, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.</p>	<p>11-09-2023 to</p> <p>05-10-2023</p>	
<b>Unit-4</b>	<p>Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is <math>R[X_1, X_2, \dots, X_n]</math></p>	<p>06-10-2023 to</p> <p>07-11-2023</p>	
<b>Revision</b>	<p>Revision of the Syllabus</p>	<p>17-11-2023 to</p> <p>Exam</p>	



**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**  
**CLASS: B.Sc.(Hons) Mathematics-II Year IIISem**  
**NAME OF PAPER – Vector Calculus**  
**PAPER CODE - BML-304**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	<p>Scalar and vector product of three vectors, product of four vectors. Reciprocal vectors.</p> <p>2.Vector differentiation.</p> <p>3.Scalar Valued point functions, vector valued point functions,</p> <p>4.derivative along a curve, directional derivatives</p>	<p>24 July 2023 to 16 Aug. 2023</p>	Test
<b>Unit-2</b>	<p>Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions &amp; implicit functions. Change of variables. Homogenous functions &amp; Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables. 1.Gradient of a scalar point function, geometrical interpretation of grad <math>\Phi</math>, character of gradient as a point function.</p> <p>2. Divergence and curl of vector point function, characters of Div <math>\vec{f}</math> and Curl <math>\vec{f}</math> as point function, examples.</p> <p>3. Gradient, divergence and curl of sums and product and their related vector identities.</p> <p>4.Laplacian operator.</p>	<p>17 Aug. 2023 to 10 September 2023</p>	Assignment

<b>Unit-3</b>	<p>1.Orthogonal curvilinear coordinates Conditions for orthogonality fundamental triad of mutually orthogonal unit vectors.</p> <p>2.Gradient, Divergence, Curl and Laplacian operators in terms of orthogonal curvilinear coordinates, Cylindrical co-ordinates and Spherical co-ordinates of two variables. Lagrange's method of multipliers.</p>	11 September 2023 to 5 Oct 2023	Test
<b>Unit-4</b>	<p>1.Vector integration; Line integral,</p> <p>2.Surface integral, Volume integral.</p> <p>3.Theorems of Gauss, Green &amp; Stokes and</p> <p>4.problems based on these theorems.</p>	6 Oct. 2023 to 7 November 2023	Test
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan**  
**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**  
**CLASS: B.Sc.(Hons) Mathematics-III Year V Sem**  
**NAME OF PAPER – Programming in C & Numerical Methods**  
**PAPER CODE - BML-503**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	1.Programmer's model of a computer, Algorithms, Flow charts, Data types,  2.Operators and expressions, Input / Output functions.	24 July 2023 to 16 Aug. 2023	Test
<b>Unit-2</b>	1.Decisions control structure: Decision statements, 2.Logical and conditional statements, Implementation of Loops, 3.Switch Statement & Case control structures. 4.Functions, Preprocessors and Arrays.	17 Aug. 2023 to 10 September 2023	Assignment
<b>Unit-3</b>	1.Strings: Character Data Type, Standard String handling Functions, Arithmetic Operations on Characters.  2.Structures: Definition, using Structures, use of Structures in Arrays and Arrays in Structures. Pointers: 3.Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method, 4.Newton-Raphson's method.  Newton's iterative method for finding pth root of a number.	11 September 2023 to 5 Oct 2023	Test
<b>Unit-4</b>	1.Simultaneous linear algebraic equations: Gauss-elimination method, Gauss-Jordan method, Triangularization method (LU decomposition method). Crout's method,	6 Oct. 2023 to 7 November 2023	Test

	2.Cholesky Decomposition method. Iterative method, Jacobi's method, Gauss-Seidal's method, Relaxation method.		
<b>Revision</b>		17 November 2023 to till exam	

**Government College, Hansi**  
**Unit wise Lesson Plan for Odd Semester 2023-24**

**Department: Mathematics**

Name of Teacher: Santosh devi

Class: B.A -II

Subject: Mathematics Lab-III

Unit	Description of Chapter / Topics	Duration
<b>Unit-1</b>	1.Programmer's model of a computer, Algorithms, Flow charts, Data types,  2.Operators and expressions, Input / Output functions.	4 <sup>th</sup> week of July  1 <sup>st</sup> week to 3 <sup>rd</sup> week of August
<b>Unit-2</b>	1.Decisions control structure: Decision statements,  2.Logical and conditional statements, Implementation of Loops,  3.Switch Statement & Case control structures.  4.Functions, Preprocessors and Arrays.	4 <sup>th</sup> week of August to 3 <sup>rd</sup> week of September
<b>Unit-3</b>	1.Strings: Character Data Type, Standard String handling Functions, Arithmetic Operations on Characters.  2.Structures: Definition, using Structures, use of Structures in Arrays and Arrays in Structures. Pointers:  3.Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method,  4.Newton-Raphson's method.  Newton's iterative method for finding pth root of a number	4 <sup>th</sup> week of September to 3 <sup>rd</sup> week of October
<b>Unit-4</b>	Newton Forward Interpolation Method  Newton Backward Interpolation Method  Gauss Forward Interpolation Method  Gauss Backward Interpolation Method	4 <sup>th</sup> Week of October to till Exam

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Physical Education**

Name of Teacher: Dr. Rajni Saini

Class: B.A 1st

Subject: Physical Education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction of Physical education- Meaning, definition, scope, aim, objective, importance, misconception of physical education	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Health and hygiene	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Introduction of Yoga	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Human anatomy and physiology of cell, tissue, organ and system	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Physical Education**

Name of Teacher: Dr. Rajni Saini

Class: B.A II

Subject :Physical Education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Concept of safety education. Sports injury. Principals, prevention, general treatment for sports injury.	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Common diseases- communicable and non communicable.	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Concept of balanced diet.	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Anatomy and physiology of circulatory system.	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Physical Education**

Name of Teacher: Dr. Rajni Saini

Class: B.A III

Subject: Physical Education

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Growth and development.	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Concept of sports Organisation and Administration.	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Concept of Posture.	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Anatomy and Physiology.	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	



**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Physical Education**

Name of Teacher: Dr. Rajni Saini

Class: B.A 1st

Subject: Physical Education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction of Physical education- Meaning, definition, scope, aim, objective, importance, misconception of physical education	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Health and hygiene	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Introduction of Yoga	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Human anatomy and physiology of cell, tissue, organ and system	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Physical Education**

Name of Teacher: Dr. Rajni Saini

Class: B.A II

Subject :Physical Education

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Concept of safety education. Sports injury. Principals, prevention, general treatment for sports injury.	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Common diseases- communicable and non communicable.	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Concept of balanced diet.	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Anatomy and physiology of circulatory system.	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Physical Education**

Name of Teacher: Dr. Rajni Saini

Class: B.A III

Subject: Physical Education

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Growth and development.	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Concept of sports Organisation and Administration.	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Concept of Posture.	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Anatomy and Physiology.	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Government College Hansi**

**Unit wise Lesson Plan for session 2023-2024**

Name of Teacher: **Babita Chaudhary**

Class: **B.A. 1<sup>st</sup> Semester**

Subject: **Political Science**

Paper: **Theory**

<b>Unit</b>	<b>Description of Chapter/Topic</b>	<b>Duration</b>	<b>Assignment/Test</b>
<b>Unit 1</b>	Indian Constitution	1st week of August to 4 <sup>th</sup> week of August	Verbal Test
<b>Unit 2</b>	Union Executive and state executive	1 <sup>st</sup> week of September 4 <sup>th</sup> week of September	1 <sup>st</sup> Assignment in 2 <sup>nd</sup> week of September
<b>Unit 3</b>	Union Legislature and State Legislature	1 <sup>st</sup> week of October to 3 <sup>rd</sup> week of October	Minor test in the 1 <sup>st</sup> week of October
<b>Unit 4</b>	Judiciary	4 <sup>th</sup> week of October to 2 <sup>nd</sup> week of November	2 <sup>nd</sup> Assignment in the 3 <sup>rd</sup> week of October
<b>Revision</b>	Revision, problem solving	2 <sup>nd</sup> and 3 <sup>rd</sup> week of November	

**Government College Hansi**  
**Unit wise Lesson Plan for Odd Semester, 2023-2024**

Name of Teacher: **Babita Chaudhary**  
Subject: **Political Science**

Class: **B.A. 5<sup>th</sup> Semester**  
Paper: **Theory**

<b>Unit</b>	<b>Description of Chapter/Topic</b>	<b>Duration</b>	<b>Assignment/Test</b>
<b>Unit 1</b>	Comparative Politics; Definition, nature and scope	1st week of August to 4th week of August	Verbal Test
<b>Unit 2</b>	Approaches to the study of Comparative Politics	1st week of September to 4th week of September	1 <sup>st</sup> Assignment in 1 <sup>st</sup> week of September
<b>Unit 3</b>	Constitutionalism	1st week of October to 3rd week of October	Minor test in the last week of September
<b>Unit 4</b>	Constitutional structure	4th week of October to 1st week of November	2 <sup>nd</sup> Assignment in the 2 <sup>nd</sup> week of October
<b>Revision</b>	Revision, problem solving	2nd and 3rd week of November	

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Psychology**

Name of Teacher: Dr. Alka

Class: B.A 1st

Subject :Psychology

Paper: Introduction to Psychology

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Psychology : history, as science, subject matter  Methods of psychology: experimental, observation, survey	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Sensory processes: visual, auditory-structure and function of Eye and Ear.  Perception: nature, perception of form-figure and background, perceptual organization, depth perception-cues.	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Emotion: nature, bodily changes, theories- James-Lange, Cannon-Bard, Schachter-Singer.  Motivation: nature, biological and psychological motives.	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Personality : nature, determinants and type and trait approach.  Intelligence : nature, theories-Spearman, Thurstone and Cattell.	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**

**Department: Psychology**

Name of Teacher: Dr. Alka

Class: B.A IInd

Subject :Psychology

Paper: Social Psychology

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction: nature, subject matter, sociometric method. Socialization: nature, process and agents of socialization.	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Group : types and functions, social norms: meaning, characteristics and formation. Leadership : type, function, theories-trait, situational and interactional.	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Attitudes : characteristics, developmental and attitude change. Prejudice : nature, development and stereotypes.	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Prosocial behavior: nature, determinants, cognitive model. Aggression : nature, determinants and prevention.	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	

**Lesson Plan Government College, Hansi**  
**Unit wise Lesson Plan for ODD Semester 2023-24**  
**Department: Psychology**

Name of Teacher: Dr. Alka

Class: B.A III

Subject : Psychology

Paper: Psychopathology

<b>Unit</b>	<b>Description of Chapter / Topics</b>	<b>Duration</b>	<b>Assignment / Test</b>
<b>Unit-1</b>	Concept of normality and abnormality. Models of Psychopathology : biological, psychodynamic, behavioural and cognitive.	24 July 2023 to 16 Aug. 2023	1st assignment in the 2nd week of August
<b>Unit-2</b>	Classification of psychopathology : need for classification, DSM system. Diagnostic Assessment : case history, interview projective techniques.	17 Aug. 2023 to 10 September 2023	Minor Test in the 1 <sup>st</sup> Week of September
<b>Unit-3</b>	Anxiety based disorder: GAD, OCD, and phobic disorders- symptoms and causes. Substance / drug abuse: causes, consequences and rehabilitation.	11 September 2023 to 5 Oct 2023	2nd Assignment in the Last Week of September
<b>Unit-4</b>	Mood disorders : unipolar and bipolar- symptoms and causes. Schizophrenia : nature, types and causes.	6 Oct. 2023 to 7 November 2023	
<b>Revision</b>		17 November 2023 to till exam	