SESSION 2020-2021

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Electricity, Magnetism and Electromagnetic Theory CLASS: B.Sc I

Name of the Teacher : Prof. GARIMA TARIKA

| WEEK | DATE | TOPICS | | |
|------|---------------------|---|--|--|
| | | Unit - I : vector background and electric field | | |
| | | gradient of a scalar and its physical significance | | |
| | November | line, surface and volume integral of a vector and their | | |
| I | (16-21) | physical significance | | |
| | | | | |
| | | | | |
| | SUN | IDAY - 22.11.2020 | | |
| | | flux of a vector, divergence and curl of a vector and | | |
| | | their physical significance | | |
| 2 | November (23- | ghost divergence theorem | | |
| 2 | 28) | | | |
| | | | | |
| | | | | |
| | SUN | IDAY - 29.11.2020 | | |
| | HOLIDAY - 30.11. | 2020 (Guru Nanak Dev Jayanti) | | |
| | | Stoke's Theorem | | |
| | | derivation of field E from potential as gradient | | |
| 3 | December (1-5) | derivation of Laplace and poisons equation | | |
| | | | | |
| | SUN | IDAY - 06.12.2020 | | |
| | | mechanical force of charged surface | | |
| | | Energy per unit volume | | |
| | December | Unit -II | | |
| 4 | (07-12) | Magnetic induction, magnetic flux | | |
| | | | | |
| | | | | |
| | SUNDAY - 13.12.2020 | | | |
| | | solenoidal nature of vector field of induction | | |
| | | Properties of B | | |
| 5 | December | electronic theory of diamagnetism | | |
| | (1+-13) | | | |
| | | | | |
| | SUN | IDAY - 20.12.2020 | | |

| | | electronic theory of paramagnetism | |
|-------------------------------------|--------------------------|---|--|
| 6 | December (21-24) (26) | domain theory of ferromagnetism | |
| | | Revision | |
| | | | |
| | | | |
| | HOLIDA | NY - 25.12.2020 (Christmas) | |
| | S | UNDAY - 27.12.2020 | |
| | | cycle of magnetisation hysteresis loop | |
| | December | Unit III | |
| 7 | (28-31) | Maxwell equations and their derivations | |
| - | January | | |
| | (1-2) | | |
| | | | |
| | S | UNDAY - 03.01.2021 | |
| | | displacement current | |
| | | vector and scalar potential | |
| 8 | January | boundary condition at interface between two different media | |
| | (4-9) | | |
| | | | |
| | | | |
| | S | UNDAY - 10.01.2021 | |
| | January (11-16) | propagation of electromagnetic wave | |
| | | poynting vector and poynting theorem | |
| 9 | | Numericals | |
| | | Unit Test | |
| | | | |
| | | UNDAY 17.01.2021 | |
| | 3 | UNDAT - 17.01.2021 | |
| | | (a) canacitance and resistance | |
| 10 | January | (a) capacitance and resistance | |
| 10 | (18-19) 21-23) | | |
| | | | |
| | ΗΟΠΡΑΧ - 20.0 | 1 2021 (Guru Gobind Singh Javanti) | |
| | S | UNDAY - 24.01.2021 | |
| | | AC circuit analysis using complex variable with | |
| | | (c) capacitance and inductance | |
| 11 | January | (d) capacitance, inductance and resistance | |
| | (25) (27-30) | Assignment 2 | |
| | | | |
| HOLIDAY - 26.01.2021 (Republic Day) | | | |
| | S | UNDAY - 31.01.2021 | |

| | | series and parallel resonant circuit |
|----|-----------------------|--|
| | | Quality factor(sharpness of resonance) |
| 10 | February | numericals |
| 12 | (01-06) | |
| | | |
| | | |
| | SUN | DAY - 07.02.2021 |
| | | |
| | February (08-13) | |
| 12 | | |
| 15 | | |
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| | SUN | DAY - 14.02.2021 |
| | February (15 - 20) | |
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| 14 | | |
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Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Classical Mechanics CLASS : B.Sc I

Name of the Teacher : Prof. DEEPA SAINI

| WEEK | DATE | TOPICS |
|------|---------------------|--|
| | | UNIT-I (BASIC CONCEPTS OF CLASSICAL MECHANICS) INTRODUCTION OF CLASSICAL MECHANICS , MECHANICS OF A SINGLE PARTICLE |
| | | TYPES OF FORCES, SOME IMPORTANT TERMS USED IN CLASSICAL MECHANICS AND THEIR BRIEF DESCRIPTION |
| 1 | November (16-21) | NEWTON'S SECOND LAW OF MOTION, WORK DONE IN TERMS OF KINETIC ENERGY AND POTENTIAL ENERGY , CONSERVATION THEOREM OF LINEAR MOMENTUM FOR A SINGLE PARTICLE |
| | | |
| | | SUNDAY - 22.11.2020 |
| | | CONSERVATION THEOREM OF ANGULAR MOMENTUM FOR A SINGLE PARTICLE |
| | | CONSERVATION THEOREM OF ENERGY FOR A SINGLE PARTICLE, |
| | November | MECHANICS OF A SYSTEM OF PARTICLES |
| 2 | (23-28) | |
| | | |
| | | |
| | | SUNDAY - 29.11.2020 |
| | | HOLIDAY - 30.11.2020 (Guru Nanak Dev Jayanti) |
| | | CENTER OF MASS OF SYSTEM OF PARTICLES |
| | December (1-5) | CONSERVATION THEOREM OF LINEAR MOMENTUM FOR A SYSTEM OF PARTICLES |
| 3 | | CONSERVATION THEOREM OF ANGULAR MOMENTUM FOR A SYSTEM OF |
| | | PARTICLES |
| | | |
| | | |
| | | |
| | | CONSERVATION THEOREM OF ANGULAR MOMENTUM OF A SYSTEM OF |
| | December (07-12) | |
| | | CONSERVATION THEOREM OF ENERGY FOR A SYSTEM OF 'N' PARTICLES, |
| 4 | | KINETIC ENERGY OF SYSTEM IN TERMS OF CM , CONSTRAINTS , (ASSIGNMENT-T) |
| | | |
| | | |
| | | SUNDAY - 13.12.2020 |
| | | DISCUSSION OF PROBLEMS BASED ON UNIT-I |
| 5 | | |
| | | EQUATIONS .GENERALIZED DISPLACEMENT |
| | December (14-19) | GENERALIZED VELOCITY, GENERALIZED ACCELERATION , GENERALIZED MOMENTUM |
| | | |
| | | |
| | | SUNDAY - 20.12.2020 |

| | | GENERALIZED FORCE , GENERALIZED POTENTIAL , ADVANTAGES OF GENERALIZED | |
|---------------------|--------------------------|---|--|
| | | COORDINATES | |
| | | CONFIGURATION SPACE , HAMILTON'S VARIATIONAL PRINCIPLE AND DERIVATION | |
| | December | | |
| 6 | (21-24) (26) | CONFIGURATION SPACE , HAMILTON'S VARIATIONAL PRINCIPLE AND DERIVATION | |
| | | | |
| | | | |
| | | | |
| | | HOLIDAY - 25.12.2020 (Christmas) | |
| | | | |
| | | IMPORTANCE OF LAGRANGIAN FORMULATION ,LINEAR HARMONIC OSCILLATOR | |
| | | ATWOOD'S MACHINE, SIMPLE PENDULUM , PROBLEM DISCUSSION | |
| _ | December | | |
| / | (28-31) January (1-2) | DISCUSSION OF PROBLEMS BASED ON UNIT-2 | |
| | January (1-2) | | |
| | | | |
| | | | |
| | | SUNDAY - 03.01.2021 | |
| | | UNIT -III (THEORY OF RELATIVITY) FRAME OF REFERENCE , LIMITATION OF | |
| | | NEWTON'S LAW OF MOTION, INERTIAL FRAME OF REFERENCE | |
| | January (4-9) | GALILEAN TRANSFORMATION , GALILEAN INVARIANCE (MEASUREMENT OF | |
| | | LENGTH &VELOCITY) | |
| 8 | | GALILEAN INVARIANCE (MEASUREMENT OF ACCELERATION) CONSERVATIONS | |
| | | LAWS ACCORDING TO GALILEAN'S TRANSFORMATIONS (CONSERVATION OF | |
| | | MOMENTOM) | |
| | | | |
| | | | |
| | | SUNDAY - 10.01.2021 | |
| | | CONSERVATION OF ENERGY , TRANSFORMATION EQUATION FOR A FRAME OF | |
| | | REFERENCE INCLINED TO AN INERTIAL FRAME | |
| | | | |
| | | TRANSFORMATION EQUATION FOR ROTATING FRAME OF REFERENCE , NON | |
| 9 | (11-16) | | |
| | (/ | ASSIGNMENT -II | |
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| | | | |
| | | THE ACCELERATED FRAME OF REFERENCE AND ROTATING FRAME OF REFERENCE | |
| | Januarv | | |
| 10 | (18-19) (21-23) | FUNDAMENTAL FRAME OF REFERENCE | |
| | | | |
| | | | |
| | | HOLIDAY - 20.01.2021 (Guru Gobind Singh Jayanti) | |
| SUNDAY - 24.01.2021 | | | |

| | | MICHELSON-MORLEY EXPERIMENT CONCEPT OF EINSTEIN'S RELATIVITY |
|----|-------------------------|--|
| | | UNIT IV: (APPLICATION OF THEORY OF RELATIVITY) SPECIAL THEORY OF |
| 11 | January (25) (27-30) | LORENTZ COORDINATE AND PHYSICAL SIGNIFICANCE OF LORENTZ INVARIANCE |
| | | |
| | | |
| | | HOLIDAY - 26.01.2021 (Republic Day) |
| | | SUNDAY - 31.01.2021 |
| | | LENGTH CONTRACTION , TIME DILATION |
| | | TWIN PARADOX, VELOCITY ADDITION THEOREM |
| 12 | February (01-06) | VARIATION OF MASS WITH VELOCITY , MASS ENERGY EQUIVALENCE |
| | | |
| | | |
| | | SUNDAY - 07.02.2021 |
| | | TRANSFORMATION OF RELATIVISTIC MOMENTUM AND ENERGY |
| | February (08-13) | |
| | | RELATION BETWEEN RELATIVISTIC MOMENTUM AND ENERGY |
| 13 | | MASS, VELOCITY , MOMENTUM AND ENERGY OF ZERO REST MASS |
| | | |
| | | |
| | | SUNDAY - 14.02.2021 |
| | | NUMERICALS |
| 14 | | Revision |
| | February | Revision |
| 14 | (15 - 20) | |
| | | |
| | | |

SESSION 2020-2021

CLASS : B.Sc I

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Org.& Inorg. Chem.

Name of the Teacher : Prof. RANJANA SHARMA

| WEEK | DATE | TOPICS | |
|---------------------|--------------------------|---|--|
| 1 | November (16-21) | Organic Chemistry- Structure and Bonding Localized and delocalized chemical bond, Van der Waal's interactions, resonance: conditions, resonance effect and its applications, hyperconjugation, inductive effect, Electromeric effect & their comparison. | |
| | | SUNDAY - 22.11.2020 | |
| 2 | November (23-28) | Stereochemistry of Organic Compounds, Concept of isomerism. Types of isomerism. Optical isomerism - elements of symmetry, molecular chirality enantiomers, stereogenic centre, optical activity, properties of enantiomers, chiral and achiral molecules with two stereogenic centres, diastereomers, threo and erythro diastereomers, | |
| | | SUNDAY - 29.11.2020 | |
| | Н | IOLIDAY - 30.11.2020 (Guru Nanak Dev Jayanti) | |
| 3 | December (1-5) | meso compounds, resolution of enantiomers, inversion, retention and racemization. Relative and absolute configuration, sequence rules, R & S systems of nomenclature. | |
| | | SUNDAY - 06.12.2020 | |
| 4 | December (07-12) | Geometric isomerism ³ / ₄ determination of configuration of geometric isomers. E & Z system of nomenclature, Conformational isomerism \Box conformational analysis of ethane and n- butane | |
| | | SUNDAY - 13.12.2020 | |
| 5 | December (14-19) | conformations of cyclohexane, axial and equatorial bonds. Newman projection and Sawhorse formulae, Difference between configuration and conformation. | |
| | | SUNDAY - 20.12.2020 | |
| 6 | December (21-24) (26) | Mechanism of Organic Reactions , Curved arrow notation, drawing electron movements with arrows, half-headed and double-headed arrows, homolytic and heterolytic bond breaking. Types of reagents – electrophiles and nucleophiles. Types of organic reactions. | |
| | | HOLIDAY - 25.12.2020 (Christmas) | |
| SUNDAY - 27.12.2020 | | | |
| 7 | December (21-24) (26) | Reactive intermediates ³ / ₄ carbocations, carbanions, free radicals, carbenes,(formation, structure & stability). | |
| SUNDAY - 03.01.2021 | | | |
| 8 | January (4-9) | Alkanes and Cycloalkanes, IUPAC nomenclature of branched and unbranched alkanes, classification of carbon atoms in alkanes. Isomerism in alkanes, sources, methods of formation: Wurtz reaction, Kolbe reaction, Corey- House reaction and decarboxylation of carboxylic acids, physical properties. | |
| SUNDAY - 10.01.2021 | | | |

| 9 | January (11-16) | Mechanism of free radical halogenation of alkanes: reactivity and selectivity.Cycloalkanes -nomenclature, synthesis of cycloalkanes and their derivatives – photochemical (2+2) cycloaddition reactions, , dehalogenation of a,w- dihalides, , pyrolysis of calcium or barium salts of dicarboxylic acids, Baeyer's strain theory and its limitations., theory of strainless rings | |
|----|---------------------------|--|--|
| | | SUNDAY - 17.01.2021 | |
| 10 | January (18-19) 21-23) | Inorganic Chemistry- Atomic Structure , Idea of de Broglie matter waves, Heinsenberg's uncertainty principle, atomic orbitals, quantum numbers, radial and angular wave functions, normal and orthogonal wave functions, significance of Ψ and Ψ^2 , probability distribution curves, shapes of s, p, d, f orbitals, Aufbau and Pauli exclusion principles, Hund's multiplicity rules, Electronic configuration of elements, effective nuclear charge, Slater's rules. | |
| | HO | OLIDAY - 20.01.2021 (Guru Gobind Singh Jayanti) | |
| | | SUNDAY - 24.01.2021 | |
| 11 | January (25) (27-30 | Periodic table and atomic properties, Classification of periodic table into s, p, d, f blocks, atomic and ionic radii, ionisation energy, electron affinity and electronegativity definition, methods of determination or evaluation, trend in periodic table (in s and p-block elements), Pauling , Mulliken, Allred Rachow and Mulliken Jaffe's electronegativity scale, Sanderson's electron density ratio. | |
| | | HOLIDAY - 26.01.2021 (Republic Day) | |
| | SUNDAY - 31.01.2021 | | |
| 12 | February (01-06) | Valence bond theory (Heitler-London and Pauling approach) and its limitation, directional characteristics of covalent bond, various type of hybridisation and shapes of simple inorganic molecules and ions (BeF ₂ , BF ₃ , CH ₄ , PF ₅ , SF ₆ , IF ₇ , SO ₄ ⁻² , ClO ₄ ⁻¹ , NO ₃ ⁻¹) | |
| | | SUNDAY - 07.02.2021 | |
| 13 | February (08-13) | Covalent Bond , Valence shell electron pair repulsion (VSEPR) theory to NH3, H3O+, SF4, ClF3, H2O, SnCl2, ClO3-1 and ICl2-1. Molecular orbital theory of homonuclear (N2, O2) heteronuclear (CO and NO) diatomic molecules and ions, bond energy, bond angle, bond length and dipole moments, percentage ionic character from dipole moment and electronegativity difference. | |
| | | SUNDAY - 14.02.2021 | |
| 14 | February (15 - 20) | Ionic Solids , Ionic structures (NaCl, CsCl, ZnS (Zinc blende), CaF ₂) size effects, radius ratio rule and its limitations, Madelung constant, Stoichiometric and Non stoichiometric defects in crystals, Lattice energy (mathematical derivation excluded) and Born- Haber cycle, Solvation energy and its relation with solubility of Ionic solids, Polarizing power and Polarisability of ions, Fajan's rule | |

SESSION 2020-2021

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Physical Chemistry

CLASS: B.Sc I

Name of the Teacher : Dr. Vikram Kumar

| WEEK | DATE | TOPICS |
|---------------------|--------------------------|---|
| 1 | November (16-21) | Kinetic Molecular Theory of Gases, Maxwell' s distribution of velocities and energies (derivation excluded) |
| | | SUNDAY - 22.11.2020 |
| 2 | November (23-28) | Calculation of root mean square velocity, average velocity and most probable velocity. Collision diameter, collision number, collision frequency and mean free path (Derivations excluded) |
| | | SUNDAY - 29.11.2020 |
| | HOLIDA | Y - 30.11.2020 (Guru Nanak Dev Jayanti) |
| 3 | December (1-5) | Deviation of Real gases fro m ideal behavior, Derivation of Van der Waal's Equation of State |
| | | SUNDAY - 06.12.2020 |
| 4 | December (07-12) | Derivation of Van der Waal's Equation of State, i ts application in the calculation of Boyle's temperature (compression factor) |
| | | SUNDAY - 13.12.2020 |
| 5 | December (14-19) | Critical temperature, critical pressure, critical volume and their determination. PV isotherms of real gases, |
| | | SUNDAY - 20.12.2020 |
| 6 | December (21-24) (26) | continuity of states, the isotherms of Van der Waal's equation, relationship between critical constants |
| | HO | DLIDAY - 25.12.2020 (Christmas) |
| | | SUNDAY - 27.12.2020 |
| 7 | December (21-24) (26) | Van der Waal' s constants. Critical compressibility factor. The Law of corresponding states. |
| SUNDAY - 03.01.2021 | | |
| 8 | January (4-9) | Classification of solids, Law of constancy of interfacial angles, law of rational indices, Miller indices |
| SUNDAY - 10.01.2021 | | |
| 9 | January (11-16) | elementary ideas of symmetry and symmetry elements, seven crystal systems and fourteen Bravais lattices; X-ray diffraction, Bragg's law, |
| SUNDAY - 17.01.2021 | | |

| 10 | January (18-19) 21-23) | a simple account of Laue method, rotating crystal method and powder pattern method. | |
|-------------------------------------|---------------------------|---|--|
| | HOLIDAY | - 20.01.2021 (Guru Gobind Singh Jayanti) | |
| | | SUNDAY - 24.01.2021 | |
| 11 | January (25) (27-30) | Structure of l iquids, Properties of l iquids – surface tension, | |
| HOLIDAY - 26.01.2021 (Republic Day) | | | |
| | | SUNDAY - 31.01.2021 | |
| 12 | February (01-06) | refractive index, viscosity, vapour pressure and optical rotation. | |
| | SUNDAY - 07.02.2021 | | |
| 13 | February (08-13) | Revision | |
| SUNDAY - 14.02.2021 | | | |
| 14 | February (15 - 20) | Revision | |

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Paper - 1

CLASS : B.Sc I (Zoology)

Name of the Teacher : Prof. PAWAN KUMAR

| WEEK | DATE | TOPICS | |
|---------------------|---------------------|------------------------------------|--|
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| 1 | November (16-21) | Introduction _ invertibrates | |
| | (10-21) | | |
| | | Introduction – invertibrates | |
| | | Porifera: General Characters | |
| | | SUNDAY - 22.11.2020 | |
| | | | |
| | | | |
| | November | | |
| 2 | (23-28) | Porifera: Classification | |
| | | Porifera: Type Study-Sycon | |
| | | | |
| | | Porifera: Type Study-Sycon | |
| SUNDAY - 29.11.2020 | | | |
| | HOLIDAY - 3 | 0.11.2020 (Guru Nanak Dev Jayanti) | |
| | | | |
| | | | |
| 3 | December (1-5) | Porifera: Type Study-Sycon | |
| | | Porifera: Type Study-Sycon | |
| | | Porifera: Type Study-Sycon | |
| SU | | SUNDAY - 06.12.2020 | |
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| 4 | December | | |
| • | (07-12) | Porifera: Canal System in Sponges | |
| | | Porifera: Spicules in Sponges | |
| | | Porifera: Biodiversity | |
| SUNDAY - 13.12.2020 | | | |
| | | | |
| | | | |
| - | December | | |
| 5 | (14-19) | Porifera: Economic importance | |
| | | porifera:- classification | |
| | | Cell Biology: Plasma Membrane | |
| | · | SUNDAY - 20.12.2020 | |

| 6 | December (21-24) (26) HOLI | Cell Biology: Plasma Membrane Class Test Cell Biology: Plasma Membrane DAY - 25.12.2020 (Christmas) SUNDAY - 27.12.2020 |
|-------------------------------------|--------------------------------------|---|
| 7 | December (28-31) January (1-2) | Cell Biology: Plasma Membrane Cell Biology: Ribosomes Cell Biology: Lysosomes |
| | 1 | SUNDAY - 03.01.2021 |
| 8 | January (4-9) | Assignment Cell Biology: Endoplasmic Reticulum Cell Biology: Golgi Complex |
| | | SUNDAY - 10.01.2021 |
| 9 | January (11-16) | Cell Biology: Mitochondria Cell Biology: Mitochondria Cell Biology: Cytoskeleton |
| | | SUNDAY - 17.01.2021 |
| 10 | January (18-19) 21-23) | Cell Biology: Cytoskeleton Cell Biology: Cytoskeleton Class Test |
| | HOLIDAY - 20 |).01.2021 (Guru Gobind Singh Jayanti) |
| SUNDAY - 24.01.2021 | | |
| 11 | January (25) (27-30 | Protozoa: Classification Protozoa: Biodiversity Protozoa: Economic Importance |
| HOLIDAY - 26.01.2021 (Republic Day) | | |
| SUNDAY - 31.01.2021 | | |

| 12 | February (01-06) | Protozoa: Plasmodium Protozoa: Plasmodium Protozoa: Entamoeba |
|----|-----------------------|---|
| | | SUNDAY - 07.02.2021 |
| 13 | February (08-13) | Protozoa: Entamoeba Protozoa: Trypanosoma Protozoa: Giardia |
| | | SUNDAY - 14.02.2021 |
| 14 | February (15 - 20) | Revision Revision Class Test |

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Life and Diversity from Coelentrata to Helminths

& Cell Biology – II

CLASS : B.Sc I (Zoology)

Name of the Teacher : Prof. MONIKA

| WEEK | DATE | TOPICS | | | |
|---------------------|---------------------|---|--|--|--|
| | | Coelentrata - General characters | | | |
| | | Biodiversity of Coelentrata | | | |
| | November | Economic importance of Coelentrata | | | |
| 1 | (16-21) | | | | |
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| | | | | | |
| | | SUNDAY - 22.11.2020 | | | |
| | | Type study of Obelia | | | |
| | | Type study of Obelia | | | |
| | November | Type study of Obelia | | | |
| 2 | (23-28) | | | | |
| | | | | | |
| | | | | | |
| | SUNDAY - 29.11.2020 | | | | |
| | HOLIDAY | ′ - 30.11.2020 (Guru Nanak Dev Jayanti) | | | |
| | | Type study of Obelia | | | |
| | December (1-5) | Type study of Obelia | | | |
| 3 | | | | | |
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| | | | | | |
| | | SUNDAY - 06.12.2020 | | | |
| | | Type study of Obelia | | | |
| | | Type study of Obelia | | | |
| 4 | December (07-12) | Type study of Obelia | | | |
| | | | | | |
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| SUNDAY - 13.12.2020 | | | | | |
| | | Type study of Obelia | | | |
| _ | | Type study of Obelia | | | |
| | December | Type study of Obelia | | | |
| 5 | (14-19) | | | | |
| | | | | | |
| | | | | | |
| SUNDAY - 20.12.2020 | | | | | |

| | _ | Metagenesis of Obelia colony | |
|---------------------|--------------------|--|--|
| 6 | | Polyp V/S medusa | |
| | (21-24) (26) | Coral and coral reefs | |
| | (22 24) (20) | | |
| | | | |
| | F | IOLIDAY - 25.12.2020 (Christmas) | |
| | | SUNDAY - 27.12.2020 | |
| | | polymorphism in siphonophores | |
| | December | Helminths - General characters | |
| 7 | (28-31) | Biodiversity of helminths | |
| | January (1-2) | | |
| | | | |
| | | | |
| | | SUNDAY - 03.01.2021 | |
| | | Economic importance of helminths | |
| | | lype study - fasciola hepatica | |
| 8 | January (4-9) | l ype study - fasciola hepatica | |
| | | | |
| | | | |
| | | SUNDAY - 10 01 2021 | |
| | [| Type study - fasciola hepatica | |
| | January (11-16) | Type study - fasciola hepatica | |
| | | Type study - fasciola hepatica | |
| 9 | | | |
| | | | |
| | | | |
| | | SUNDAY - 17.01.2021 | |
| | | Helminths parasites | |
| | lanuami | Helminths parasites | |
| 10 | (18-19) 21-23) | | |
| | (| | |
| | | | |
| | HOLIDAY | - 20.01.2021 (Guru Gobind Singh Jayanti) | |
| SUNDAY - 24.01.2021 | | | |
| 11 | | Oxyuris | |
| | Januarv | Nuclear membrane | |
| | (25) (27-30) | | |
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| | | | |
| SUNDAY - 31.01.2021 | | | |

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|----|-----------|--|
| | | Necleolus |
| | | Nucleosome |
| 13 | February | Euchromatin and Heterochromatin chromosome |
| 14 | (01-06) | |
| | | |
| | | |
| | | SUNDAY - 07.02.2021 |
| | | Lambrush chromosome |
| | | Polytene chromosome |
| 12 | February | Mitosis |
| 15 | (08-13) | |
| | | |
| | | |
| | | SUNDAY - 14.02.2021 |
| | | Meiosis |
| | | Cause of cancer |
| 14 | February | cellular basis of immunity |
| 14 | (15 - 20) | |
| | | |
| | | |

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Diversity of Microbes

CLASS : B.Sc I

Name of the Teacher : Prof. RAJNI

WEEK DATE TOPICS November 1 (16-21) Bacteria structure Reproduction in bacteria Continued SUNDAY - 22.11.2020 November 2 (23-28) Cyanobacteria structure and Reproduction Cyanobacteria structure and Reproduction Nostoc SUNDAY - 29.11.2020 HOLIDAY - 30.11.2020 (Guru Nanak Dev Jayanti) 3 December (1-5) Introduction to algae Introduction to algae Economic importance of algae SUNDAY - 06.12.2020 December 4 (07-12) Classification of algae Volvox structure and Reproduction Volvox structure and Reproduction SUNDAY - 13.12.2020 December 5 (14-19) Oedogonium structure and Reproduction Continued Continued SUNDAY - 20.12.2020

| 6 | | | |
|-------------------------------------|--------------------------|--|--|
| | December (21-24) (26) | | |
| | (21-24) (20) | Oedogonium life cycle | |
| | | Oedogonium life cycle continued | |
| | н | OLIDAY - 25.12.2020 (Christmas) | |
| | | SUNDAY - 27.12.2020 | |
| | | | |
| | | | |
| _ | December | | |
| / | (28-31) January (1-2) | Vaucheria structure | |
| | January (1-2) | Vaucheria life cycle | |
| | | Ectocarpus structure and Reproduction | |
| | | SUNDAY - 03.01.2021 | |
| | | | |
| | | | |
| | Januarv | | |
| 8 | (4-9) | Ectocarpus structure and Reproduction continued | |
| | | Polysiphonia structure and Reproduction | |
| | | Polysiphonia life cycle | |
| | | SUNDAY - 10.01.2021 | |
| | | | |
| | | | |
| | January (11-16) | | |
| 9 | | Introduction to virus | |
| | | Structure of TMV and BACTERIOPHAGE, transmission of viruse | |
| | | continued | |
| | | SUNDAY - 17.01.2021 | |
| | | | |
| | | | |
| 10 | January | Introduction to fungi | |
| | (18-19) 21-23) | Introduction to fungi continued | |
| | | Classification of fungi | |
| | HOLIDAY | - 20.01.2021 (Guru Gobind Singh Jayanti) | |
| SUNDAY - 24.01.2021 | | | |
| | | | |
| | | | |
| 11 | January (25) (27-30 | Phtophthora | |
| | | Phtophthora continued | |
| | | Mucor | |
| HOLIDAY - 26.01.2021 (Republic Day) | | | |
| | SUNDAY - 31.01.2021 | | |

| 12 | February (01-06) | Mucor continued Penicillium Penicillium continued |
|----|-----------------------|---|
| | | SUNDAY - 07.02.2021 |
| 13 | February (08-13) | Test Agaricus Agaricus continued |
| | | SUNDAY - 14.02.2021 |
| 14 | February (15 - 20) | Puccinia Puccinia Puccinia continued |

Weekly Lesson Plan (Odd Semester)

Ist Semester

Name of the Paper:- CELL BIOLOGY

Class: 1st year

Name of the Teachers (Section wise): Dr. Nidhan Singh

| WEEK | DATE | TOPICS |
|---|---------------------|--|
| 1 | November (16-21) | Structure and functions of Cell Wall |
| | | Structure and functions of Cell Wall |
| | | Structure and functions of Plasma Membrane. |
| | | SUNDAY - 22.11.2020 |
| | | Structure and functions of Plasma Membrane. |
| 2 | November (23-28) | Theories of Plasma Membrane |
| | () | Ultrastructure and function of nucleus |
| | | SUNDAY - 29.11.2020 |
| HOLIDAY - 30.11.2020 (Guru Nanak Dev Jayanti) | | |
| | | Ultrastructure and function of nucleus |
| 3 | December (1-5) | Ultrastructure and function of nucleus |
| | | Revision |
| | | SUNDAY - 06.12.2020 |
| | December (07-12) | Ultrastructure and function of Nucleus |
| 4 | | Ultrastructure and function of Golgi Apparatus |
| | | Ultrastructure and function of Golgi Apparatus |
| | | SUNDAY - 13.12.2020 |
| | December (14-19) | Ultrastructure and function of Golgi Apparatus |
| 5 | | Ultrastructure and function of Endoplasmic Reticulum |
| | () | Ultrastructure and function of Endoplasmic Reticulum |
| SUNDAY - 20.12.2020 | | |
| 6 | Docombor | Ultrastructure and function of Chloroplast |
| | (21-24) (26) | Revision |
| (), (-0) | | Test |
| HOLIDAY - 25.12.2020 (Christmas) | | |
| SUNDAY - 27.12.2020 | | |

| 7 | December (28-31) | Ultrastructure and function of Chloroplast | |
|-------------------------------------|-------------------------|---|--|
| | | Ultrastructure and function of Chloroplast | |
| | January (1-2) | Ultrastructure and function of Mitochondria | |
| | | SUNDAY - 03.01.2021 | |
| | | Ultrastructure and function of Mitochondria | |
| 8 | January (4-9) | Ultrastructure and function of Lysosomes | |
| | | Ultrastructure and function of Lysosomes | |
| | | SUNDAY - 10.01.2021 | |
| | | Ultrastructure and function of Peroxisomes and Vacuoles | |
| 9 | January (11-16) | Ultrastructure and function of Peroxisomes and Vacuoles | |
| | | Revision | |
| | | SUNDAY - 17.01.2021 | |
| | lonuom/(18,10) | Cell Division: Mitosis | |
| 10 | January (18-19) | Cell Division: Mitosis | |
| | 21-23) | Cell Division: Meiosis | |
| | HOLIDAY - 20 | .01.2021 (Guru Gobind Singh Jayanti) | |
| | SUNDAY - 24.01.2021 | | |
| | January (25) (27-30) | Cell Division: Meiosis | |
| 11 | | Morphology of Chromosome | |
| | , , | Morphology of Chromosome | |
| HOLIDAY - 26.01.2021 (Republic Day) | | | |
| SUNDAY - 31.01.2021 | | | |
| | February (01-06) | organization, ultrastructure of Centromere | |
| 12 | | organization, ultrastructure of Telomere | |
| | | Chromosomal alterations | |
| | SUNDAY - 07.02.2021 | | |
| | | Chromosomal Alterations | |
| 13 | February (08-13) | Variations in Chromosome number | |
| | | Variations in Chromosome number | |
| SUNDAY - 14.02.2021 | | | |
| | February | Sex chromosomes and Sex determination. | |
| 15 | (15 - 20) | Revision | |
| | (, | Revision | |

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Introduction to Biotechnology

CLASS : B.Sc I

Name of the Teacher : Prof. POOJA JAIN

| WEEK | DATE | TOPICS | |
|---------------------|---------------------|--|--|
| | | introductiointroduction to Biotechnology | |
| | | Scopes in Biotechnology | |
| | November | Applications of Biotechnology | |
| L | (16-21) | | |
| | | | |
| | | | |
| | | SUNDAY - 22.11.2020 | |
| | | Applications of Biotechnology | |
| | | Introduction to Genetic Engineering | |
| 2 | November | Plant tissue Culture | |
| 2 | (23-28) | | |
| | | | |
| | | | |
| | | SUNDAY - 29.11.2020 | |
| | HOLIDAY - 3 | 0.11.2020 (Guru Nanak Dev Jayanti) | |
| | | Plant tissue Culture | |
| | December (1-5) | Plant tissue Culture | |
| 3 | | Plant tissue Culture | |
| | | | |
| | | | |
| | [| SUNDAY - 06.12.2020 | |
| | | Animal Tissue Culture | |
| | - · | Animal Tissue Culture | |
| 4 | December (07-12) | | |
| | (07 12) | | |
| | | | |
| SUNDAY - 13.12.2020 | | | |
| | | Animal Tissue Culture | |
| | | Cell lines and their maintenance | |
| - | December | Cryopreservation | |
| 5 | (14-19) | | |
| | | | |
| | | | |
| SUNDAY - 20.12.2020 | | | |

| | | Fermentation | |
|---------------------|-------------------------|---------------------------------------|--|
| 6 | December | Fermentation | |
| | | Immunomobilization of Enzumes | |
| | (21-24) (20) | | |
| | | | |
| | HOLI | DAY - 25.12.2020 (Christmas) | |
| | | SUNDAY - 27.12.2020 | |
| | | Immunomobilization of Enzumes | |
| | Describer | Monoclonal antibody | |
| 7 | (28-31) | Monoclonal antibody | |
| - | January (1-2) | | |
| | | | |
| | | | |
| | | SUNDAY - 03.01.2021 | |
| | | Invitro fertilization | |
| | | Embryo transfer Technology | |
| 8 | January (4-9) | Introduction to Gene and genome | |
| | | | |
| | | | |
| | | SUNDAY 10.01.2021 | |
| | | Introduction to Gone and genome | |
| | January (11-16) | Proteins and proteoms | |
| | | Proteins and proteoms | |
| 9 | | | |
| | | | |
| | | | |
| | | SUNDAY - 17.01.2021 | |
| | | Genetic manipulation | |
| | | genetic manipulation | |
| 10 | 21-23) | | |
| | , | | |
| | | | |
| | HOLIDAY - 20 | 0.01.2021 (Guru Gobind Singh Jayanti) | |
| | | SUNDAY - 24.01.2021 | |
| 11 | | UNA fingerprinting | |
| | January (25) (27-30) | | |
| | | | |
| | | | |
| | | | |
| SUNDAY - 21 01 2021 | | | |
| SUNDAT - 31.01.2021 | | | |

| | | Bioremediation |
|----|-----------|---|
| | | waste treatment Biotechnology |
| 12 | February | Biotechnology research in India |
| 12 | (01-06) | |
| | | |
| | | |
| | | SUNDAY - 07.02.2021 |
| | | scientific guidelines and risk in context of developing Countries |
| | | Biotechnology growth in context of developmental Science |
| 12 | February | Biotechnology growth in context of developmental Science |
| 13 | (08-13) | |
| | | |
| | | |
| | | SUNDAY - 14.02.2021 |
| | | Ethics in Biotechnology |
| | | intellectual property rights |
| 14 | February | revision |
| | (15 - 20) | |
| | | |
| | | |

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Paper 2 biochemistry - 1

CLASS: B.Sc I

Name of the Teacher : Prof. MONIKA

| WEEK | DATE | TOPICS |
|------|----------------|---|
| | | |
| | | |
| | Novombor | |
| 1 | (16-21) | Riomolecules - Introduction |
| | | |
| | | Carbonydrates- Introduction |
| | | Biological significance of Carbohydrates |
| | 1 | SUNDAY - 22.11.2020 |
| | | |
| | | |
| 2 | November | |
| 2 | (23-28) | Monosaccharides |
| | | Families of monosaccharides |
| | | Stereoisomerism |
| | | SUNDAY - 29.11.2020 |
| | HOLIDAY - 3 | 0.11.2020 (Guru Nanak Dev Jayanti) |
| | | |
| | | |
| 3 | December (1-5) | Disaccharides |
| | | Oligosaccharides |
| | | Homo and Heteropolysaccarides |
| | • | SUNDAY - 06.12.2020 |
| | | |
| | | |
| | December | |
| 4 | (07-12) | Storage polysaccharide |
| | | Structure and function of Mucopolysaccharides |
| | | Amino acids |
| | | SUNDAY - 13.12.2020 |
| | | |
| | | |
| - | December | |
| 5 | (14-19) | Classification of amino acids |
| | | Optical properties of amino acids |
| | | Acid/Base behaviour of proteins |
| | · | SUNDAY - 20.12.2020 |

| | December | |
|----|--------------------------|--|
| 6 | (21-24) (26) | |
| | () () | Pka value of amino Acids |
| | | Titration curve |
| | HOLI | DAY - 25.12.2020 (Christmas) |
| | | SUNDAY - 27.12.2020 |
| | | |
| | | |
| - | December | |
| / | (28-31) January (1-2) | Structural organisation of protein |
| | 5411441 y (1 2) | Primary structure of protein |
| | | Secondary structure of protein |
| | | SUNDAY - 03.01.2021 |
| | | |
| | | |
| | | |
| 8 | January (4-9) | tertiary and guaternary structure of protein |
| | | Amino acid analysis |
| | | |
| | | SUNDAY - 10 01 2021 |
| | | |
| | | |
| | | |
| 9 | January (11-16) | Sanger's method |
| | | fatty acide |
| | | Taccy actus |
| | | |
| | | SUNDAT - 17.01.2021 |
| | | |
| 10 | January | |
| 10 | (18-19) 21-23) | Structure and function of triacylglycerols |
| | | Phospholipids |
| | | Glycolipid |
| | HOLIDAY - 20 | .01.2021 (Guru Gobind Singh Jayanti) |
| | I | SUNDAY - 24.01.2021 |
| | | |
| | January | |
| 11 | (25) (27-30) | Bile salts |
| | | Bile acids |
| | | Nucleotides |
| | HOLID | AY - 26.01.2021 (Republic Day) |
| | | SUNDAY - 31.01.2021 |

| 12 | February (01-06) | Bases Sugars Phosphates |
|----|-----------------------|---------------------------------|
| | | SUNDAY - 07.02.2021 |
| 13 | February (08-13) | DNA RNA Properties of DNA |
| | | SUNDAY - 14.02.2021 |
| 14 | February (15 - 20) | ATP GTP Coenzymes |

SESSION 2020-2021

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Algebra

CLASS: B.Sc I

Name of the Teacher : Dr. ARPANA GARG

| WEEK | DATE | TOPICS | | | |
|-----------------------|------------------------------------|--|--|--|--|
| | | Matrices and Elementary Properties | | | |
| 1 Novemb 1 (16-21) | | Matrices and Elementary Properties | | | |
| | November (16-21) | Matrices and Elementary Properties | | | |
| | | Matrices and Elementary Properties | | | |
| | | Matrices and Elementary Properties | | | |
| | | Matrices and Elementary Properties | | | |
| | | SUNDAY - 22.11.2020 | | | |
| | Matrices and Elementary Properties | | | | |
| | | Matrices and Elementary Properties | | | |
| | November | Rank of a Matrix | | | |
| 2 | (23-28) | Row Echelon Form | | | |
| | | Row Echelon Form | | | |
| | | Row reduced echelon form | | | |
| | I | SUNDAY - 29.11.2020 | | | |
| | HOLIDA | Y - 30.11.2020 (Guru Nanak Dev Jayanti) | | | |
| | | Row reduced echelon form | | | |
| | | Theorem based on Normal Form | | | |
| 3 | December (1-5) | Normal Form | | | |
| | | Normal Form | | | |
| | | Inverse of a Matrix | | | |
| | SUNDAY - 06.12.2020 | | | | |
| | | Inverse of a Matrix | | | |
| | | Elementary matrices | | | |
| 4 | December | Elementary matrices | | | |
| | (07-12) | Linearly independent and dependant vectors | | | |
| | | Linearly independent and dependant vectors | | | |
| | | | | | |
| | | SUNDAY - 13.12.2020 | | | |
| | | Orthogonal Matrix | | | |
| | | Unitary Matrix | | | |
| 5 | December | Characteristic roots of a matrix | | | |
| | (14-19) | Characteristic roots of a matrix | | | |
| | Characterstic Vectors of a Matrix | | | | |
| | | Characterstic Vectors of a Matrix | | | |
| SUNDAY - 20.12.2020 | | | | | |

| | | Theroems Based on characteristic roots of a matrix | | | | |
|---------------------|----------------------------------|--|--|--|--|--|
| 6 | December (21-24) (26) | Theroems Based on characteristic roots of a matrix | | | | |
| | | Cayley hamilton theorem | | | | |
| | (),(), | questions based on cayley Hamilton Theorem | | | | |
| | | | | | | |
| | HOLIDAY - 25.12.2020 (Christmas) | | | | | |
| | | SUNDAY - 27.12.2020 | | | | |
| | | Minimal Polynomial of a matrix | | | | |
| | | Minimal Polynomial of a matrix | | | | |
| 7 | (28-31) | Application of matrices to solve system of equations | | | | |
| , | January (1-2) | Application of matrices to solve system of equations | | | | |
| | | Non-Homogeneous system of equations | | | | |
| | | Non-Homogeneous system of equations | | | | |
| | | SUNDAY - 03.01.2021 | | | | |
| | | Homogeneous system of equations | | | | |
| | | General properties of polynomial and equations | | | | |
| 8 | January (4-9) | Thoerem based on polynomials | | | | |
| 0 | January (4-5) | Horner's method of synthetic division | | | | |
| | | Fundamental theorem of algebra | | | | |
| | | numericals based on polynomials | | | | |
| | - | SUNDAY - 10.01.2021 | | | | |
| | | Horner's method of synthetic division | | | | |
| | January (11-16) | Horner's method of synthetic division | | | | |
| 9 | | Fundamental theorem of algebra | | | | |
| - | | Thoerem based on polynomials | | | | |
| | | numericals based on polynomials | | | | |
| | | Relation between the roots and coefficients of an equation | | | | |
| SUNDAY - 17.01.2021 | | | | | | |
| | | Relation between the roots and coefficients of an equation | | | | |
| | January (18-19) | common roots and repeated roots | | | | |
| 10 | 21-23) | Transformation of equation | | | | |
| | | Diminishing roots by a given number | | | | |
| | | Equation with binomial coefficients | | | | |
| | HOLIDAY | - 20.01.2021 (Guru Gobind Singh Jayanti) | | | | |
| | ſ | SUNDAY - 24.01.2021 | | | | |
| | | Transform an equation whose roots are algebraic functions of the roots of the given equation | | | | |
| 11 | January (25) | Transform an equation whose roots are algebraic functions of the roots of the given equation | | | | |
| | (27-30 | Roots of squared differences of a cubic | | | | |
| | | Discarte's rule of sign | | | | |
| | | Discarte's rule of sign | | | | |
| | нс | DLIDAY - 26.01.2021 (Republic Day) | | | | |
| | | SUNDAY - 31.01.2021 | | | | |

| | February (01-06) | Cardan's method to solve cubic equation |
|----|-----------------------|--|
| 12 | | Irreducible case of Cardan's method |
| | | numericals based on Cardan;s method |
| 12 | | Biquadratic Equation by Decarte's rule |
| | | Ferrari's method of solving biquadratic equation |
| | | Numericals based on biquadratic equation |
| | | SUNDAY - 07.02.2021 |
| 12 | February (08-13) | Bilinear form |
| | | Canonical bilinear form |
| | | Matrix of quadratic form |
| 15 | | Rank, Index and signature of a quadratic form |
| | | lagrange's method of diagonalisation |
| | | Factorisation of a quadratic form |
| | | SUNDAY - 14.02.2021 |
| | | Nature of quadratic form |
| | | Revision |
| 14 | February (15 - 20) | Revision |
| 14 | | Revision |
| | | Revision |
| | | Revision |

SESSION 2020-2021

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Calculus

CLASS : B.Sc I

Name of the Teacher : Ms. KANAK SHARMA

| WEEK | DATE | TOPICS | | | |
|------|---|---|--|--|--|
| | | Derivative of a Function, Basics of Differentiation and Integration | | | |
| 1 | November (16-21) | Successive Differentiation | | | |
| | | Questions based on Successive Differentiation | | | |
| | | Questions based on Successive Differentiation | | | |
| | | Differentiation of Parametric Functions | | | |
| | | Differentiation of Parametric Functions | | | |
| | | SUNDAY - 22.11.2020 | | | |
| | Differentiation using Partial Fractions | | | | |
| | | Differentiation using Partial Fractions | | | |
| | November | Leibnitz's Theorem | | | |
| 2 | (23-28) | Questions based on Leibnitz's Theorem | | | |
| | | Questions based on Leibnitz's Theorem | | | |
| | | | | | |
| | | | | | |
| | н | OLIDAY - 30 11 2020 (Guru Nanak Dev Javanti) | | | |
| | | Problem Discussion | | | |
| 3 | | Taylor's Theorem with Lagrange's form of remainder | | | |
| | December (1-5) | Questions based on Taylor's Theorem | | | |
| | | Taylor's Theorem with Cauchy's form of remainder | | | |
| | | Questions based on Taylor's Theorem with Cauchy's form of remainder | | | |
| | | SUNDAY - 06.12.2020 | | | |
| | Infinite Series | | | | |
| | | Infinite Series | | | |
| 4 | December | Infinite Series | | | |
| 4 | (07-12) | Applications of Taylor's Series | | | |
| | | Applications of Taylor's Series | | | |
| | | Expansion by Differential Equations | | | |
| | | SUNDAY - 13.12.2020 | | | |
| | | Expansion by Differential Equations | | | |
| | | Asymptotes | | | |
| 5 | December | Oblique Asymptotes and Questions based on it | | | |
| | (14-19) | Oblique Asymptotes of Algebraic Curve | | | |
| | | Oblique Asymptotes of Algebraic Curve | | | |
| | | Oblique Asymptotes of Algebraic Curve | | | |
| | | SUNDAY - 20.12.2020 | | | |

| | | Intersection of Curve and its Asymptotes | |
|---------------------|----------------------------|--|--|
| 6 | 6 December (21-24) (26) | Intersection of Curve and its Asymptotes | |
| | | Polar Asymptotes | |
| | | Polar Asymptotes | |
| | | Problem Discussion | |
| | | HOLIDAY - 25.12.2020 (Christmas) | |
| | | SUNDAY - 27.12.2020 | |
| | | Curvature | |
| | Deserves | Articles related to Curvature | |
| 7 | (28-31) | Questions based on Curvature | |
| , | January (1-2) | Questions based on Curvature | |
| | | Radius of Curvature in Polar Form | |
| | | Radius of Curvature in Polar Form | |
| | | SUNDAY - 03.01.2021 | |
| | | Curvature at Origin | |
| | | Centre of Curvature and Evolute of a Curve | |
| 8 | lanuary (4-9) | Centre of Curvature and Evolute of a Curve | |
| 5 | 5andary (1 5) | Curve Tracing | |
| | | Curve Tracing | |
| | | Parametric Equations | |
| | | SUNDAY - 10.01.2021 | |
| | January (11-16) | Tracing of Polar Curves | |
| | | Tracing of Polar Curves | |
| 9 | | Reduction Formulae | |
| | | Articles related to Reduction Formulae | |
| | | Articles related to Reduction Formulae | |
| | | Questions based on Reduction Formulae | |
| | | SUNDAY - 17.01.2021 | |
| | | Questions based on Reduction Formulae | |
| | January (18-19) | Questions based on Reduction Formulae | |
| 10 | 21-23) | Rectification, Fundamental Theorem about Rectification | |
| | | Rectification, Fundamental Theorem about Rectification | |
| | | Length of Parametric Curves | |
| | НО | LIDAY - 20.01.2021 (Guru Gobind Singh Jayanti) | |
| | | SUNDAY - 24.01.2021 | |
| | | Length of Parametric Curves | |
| | January (25) | Length of Polar Curves | |
| 11 | (27-30 | Intrinsic Equation of a Curve | |
| | | Quadrature | |
| | | Questions based on Quadrature | |
| | | HOLIDAY - 26.01.2021 (Republic Day) | |
| SUNDAY - 31.01.2021 | | | |

| 12 Fab | | Area Between Two Curves |
|--------|------------------|---|
| | February (01-06) | Area Formula for Parametric Curves |
| | | Area Formula for Parametric Curves |
| 12 | | Area Between Two Polar Curves |
| | | Volume of a Solid of Revolution |
| | | Axis of Revolution |
| | | SUNDAY - 07.02.2021 |
| | February (08-13) | Volume formula for Polar Curves and Parametric Curves |
| | | Area of a Surface of Revolution |
| 12 | | Theorems and questions based on Limits of Functions |
| 15 | | Theorems and questions based on Limits of Functions |
| | | Continuous Functions |
| | | Theorems and questions based on Continuous Functions |
| | | SUNDAY - 14.02.2021 |
| | | Theorems and questions based on Continuous Functions |
| | | Singular Points |
| 14 | February | Articles and Questions based on Singular Points |
| 14 | (15 - 20) | Articles and Questions based on Singular Points |
| | | Articles and Questions based on Singular Points |
| | | Problem Discussion |

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- SOLID GEOMETRY

CLASS: B.Sc I

Name of the Teacher : Ms. GITIKA DUREJA

| WEEK | DATE | TOPICS | | | |
|---------------------|----------------------|--|--|--|--|
| | | Introduction to Conic Sections | | | |
| 4 | November | General Equation of Second Degree | | | |
| | | Finding Lengths and equations of axis a central conic | | | |
| 1 | (16-21) | Numericals Based on Central Conic | | | |
| | | Parabola in General and related numericals | | | |
| | | Tracing of Conics | | | |
| | | SUNDAY - 22.11.2020 | | | |
| | Tracing of Conics | | | | |
| | | Tangent and normal of a conic | | | |
| 2 | November | Articles and numericals based on tangent and normal | | | |
| 2 | (23-28) | Problem discussion | | | |
| | | Pole and Polar of a conic | | | |
| | | Numericals on Pole and Polar | | | |
| | | SUNDAY - 29.11.2020 | | | |
| | HOLIDAY - 30 | .11.2020 (Guru Nanak Dev Jayanti) | | | |
| | | System of Conics | | | |
| | | Related articles and numericals of system of equations | | | |
| 3 | December (1-5) | Confocal Conics | | | |
| | | Related Numericals | | | |
| | | Polar coordinates | | | |
| SUNDAY - 06.12.2020 | | | | | |
| | | Straight line in polar form | | | |
| | | Circle in Polar form | | | |
| 4 | December | Related Numericals | | | |
| | (07-12) | Sphere : Centre, radius and various forms of sphere | | | |
| | | Sphere passing through four points | | | |
| | | Plane section of a sphere | | | |
| | : | SUNDAY - 13.12.2020 | | | |
| | | Related Numericals | | | |
| | December (14-19) | Sphere passing through a given circle | | | |
| 5 | | Intersection of two spheres | | | |
| 5 | | Sphere and a line | | | |
| | | Related Numericals | | | |
| | Tangents to a sphere | | | | |
| | SUNDAY - 20.12.2020 | | | | |

| | | Diametral and Polar Plane | | |
|----|--------------------------|---|--|--|
| 6 | December (21-24) (26) | Intersection of two spheres | | |
| | | Radical Plane | | |
| | (== = :) (=0) | Problrm Discussion | | |
| | | Equation of a cone with a given vertex and conic as base | | |
| | HOLID | AY - 25.12.2020 (Christmas) | | |
| | | SUNDAY - 27.12.2020 | | |
| | | Equation of a the right circular cone | | |
| | | Equation of enveloping cone | | |
| 7 | (28-21) | Cone representation by general equation of second degree | | |
| , | January (1-2) | Related Numericals | | |
| | | Equation of a quadric cone through axes | | |
| | | Condition of cone to have three perpendicular generators | | |
| | | SUNDAY - 03.01.2021 | | |
| | | Equation of a tangent plane | | |
| | | Condition of tangency | | |
| 8 | January (4-9) | Equation of reciprocal cone | | |
| U | Sundary (+ S) | Equation of a right circular cylinder in standard form | | |
| | | Equation of cylinder whose axis and guiding curve are given | | |
| | | Equation of enveloping cylinder | | |
| | | SUNDAY - 10.01.2021 | | |
| | | Problem discussion | | |
| | January (11-16) | Conicoid | | |
| 9 | | Equation of tangency plane | | |
| 5 | | Condition of tangency | | |
| | | The equation of director sphere | | |
| | | Equation of the Normal | | |
| | : | SUNDAY - 17.01.2021 | | |
| | | Number of normals from a given point | | |
| | lanuary | Cubic curve through the feet of six normals | | |
| 10 | (18-19) 21-23) | Quadric cone through sic concurrent normals | | |
| | | Polar plane of a point | | |
| | | Reciprocal Property | | |
| | HOLIDAY - 20.0 | 01.2021 (Guru Gobind Singh Jayanti) | | |
| | : | SUNDAY - 24.01.2021 | | |
| | | Pole of a given plane | | |
| | lanuary | Polar of a line w.r.t. a conicoid | | |
| 11 | January (25) (27-30) | Diametral Plane property | | |
| | | Intersection of a line and a paraboloid | | |
| | | Condition of tangency of a line for a paraboloid | | |
| | HOLIDA | Y - 26.01.2021 (Republic Day) | | |
| | SUNDAY - 31.01.2021 | | | |

| | | Central plane sections of a central conicoid |
|----|---------------------|--|
| | February (01-06) | Circular sections |
| 12 | | Generating Lines of a hyperbolic of one sheet |
| 12 | | Generating Lines of a hyperbolic paraboloid |
| | | Confocal Conicoids |
| | | Confocal through a given point |
| | | SUNDAY - 07.02.2021 |
| 12 | February (08-13) | Confocal touching a given plane |
| | | Elliptic coordinates |
| | | Locus of poles of planes with respect to confocals |
| 15 | | Normals to th three confocals through a point |
| | | Equation of enveloping cone |
| | | Intersection of a line and a conicoid |
| | | SUNDAY - 14.02.2021 |
| | | Finding an eqn of chord which is bisected at a given point |
| | | Diametral plane conjugate to a given direction |
| 14 | February | Pricipal direction and Principal planes |
| 14 | (15 - 20) | Reduction general equation of second degree |
| | | Related Numericals |
| | | Problem discussion |

SESSION 2020-2021

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

CLASS : B.Sc I

Name of the Paper:- PC SOFTWARE

Name of the Teacher : Ms. DEEPTY JUNEJA

| 1 November (16-21) Basics of Windows, Windows History | |
|--|--|
| 1 November (16-21) Basics of Windows, Windows History | |
| 1 November (16-21) Basics of Windows,Windows History | |
| 1 (16-21) Basics of Windows,Windows History | |
| | |
| Racios components of Windows icons & type of icons | |
| Taskbar, Activating Windows | |
| SUNDAY - 22.11.2020 | |
| | |
| | |
| | |
| 2 November | |
| (23-28) Desktop,Title Bar,Running Applications | |
| Windows Explorer, Managing Files & Folder | |
| Windows Explorer, Managing Files & Folder | |
| SUNDAY - 29.11.2020 | |
| HOLIDAY - 30.11.2020 (Guru Nanak Dev Jayanti) | |
| | |
| | |
| 3 December (1-5) Configuring System Devices | |
| Control Panel ,Windows Accessories | |
| Inroduction to Office Automation | |
| SUNDAY - 06.12.2020 | |
| | |
| | |
| 4 December | |
| (07-12) Creating And Editing Documents, Formatting Documents | |
| Auto Text ,Autocorrect,Spelling & Grammer Tools | |
| Document Dictionary,Page Formatting | |
| SUNDAY - 13.12.2020 | |
| | |
| | |
| 5 December | |
| (14-19) Bookmark,Advance Features of MS-Word | |
| Mail Merge | |
| Macro, Tables | |

| 6 | December (21-24) (26) | | | |
|-------------------------------------|--------------------------|---|--|--|
| | | | | |
| | | | | |
| | (22 24) (20) | Assignment I | | |
| | | File Management | | |
| | | HOLIDAY - 25.12.2020 (Christmas) | | |
| | | SUNDAY - 27.12.2020 | | |
| | | | | |
| | | | | |
| 7 | December | | | |
| / | (28-31) Ianuary (1-2) | Printing,Styles | | |
| | Junuary (2 =, | Linking & Embedding Objects | | |
| | | Introduction to MS-Excel,Creating & Editing Worksheet | | |
| | SUNDAY - 03.01.2021 | | | |
| | | | | |
| | | | | |
| | lanuary | | | |
| 8 | (4-9) | Enrmatting 9. Escential Anerations | | |
| | • • | | | |
| | | Charte | | |
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| | | | | |
| | lanuari. | | | |
| 9 | (11-16) | | | |
| | (11-10) | Pivot Table & Pivot Chart | | |
| | | Conditional Test | | |
| | | Linking & Consolidation | | |
| | | SUNDAY - 17.01.2021 | | |
| | | | | |
| | January | | | |
| 10 | (18-19) 21-23) | Database Management using Excel-Sorting, | | |
| | | Filtering | | |
| | | Table,Validation | | |
| | НС | DLIDAY - 20.01.2021 (Guru Gobind Singh Jayanti) | | |
| | | SUNDAY - 24.01.2021 | | |
| | | | | |
| 11 | January (25) (27-30) | | | |
| | | Goal Seek,Scenario | | |
| | | Inroduction of Power Point | | |
| | | Creating & Manipulating & Enhancing Slides | | |
| HOLIDAY - 26.01.2021 (Republic Day) | | | | |
| SUNDAY - 31.01.2021 | | | | |

| 12 | February (01-06) | Organisational Charts Assignment II Excel Charts |
|---------------------|-----------------------|---|
| SUNDAY - 07.02.2021 | | |
| 13 | February (08-13) | Word Art, Layering at Objects Class Test Animation And Sound,Inserting Animated Pictures or Accessing through Objects |
| | | SUNDAY - 14.02.2021 |
| 14 | February (15 - 20) | Inserting Recorded Sound Effects or in Built Sound Effects Revision Revision |

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- Computer Fundamentals

CLASS : B.Sc I

Name of the Teacher : Ms. DEEPTY JUNEJA

| WEEK | DATE | TOPICS |
|---------------------|---------------------|--|
| 1 | | Definition & Functional components of computer |
| | | Characteristics & Limitation of computerclassification of computers |
| | November | Classification of Computer |
| 1 | (16-21) | |
| | | |
| | | |
| | | SUNDAY - 22.11.2020 |
| | | Classification of Computer |
| | | Applications of Computer |
| 2 | November | Memory: Concept of primary & secondary memory |
| 2 | (23-28) | |
| | | |
| | | |
| SUNDAY - 29.11.2020 | | |
| | HOL | IDAY - 30.11.2020 (Guru Nanak Dev Jayanti) |
| | | RAM, ROM, types of ROM, |
| | | Cache memory, CPU Registers |
| 3 | December (1-5) | |
| | | |
| | | SUNDAV 06 12 2020 |
| | | |
| | | Tiash memory, Secondary storage devices: magnetic tape magnetic disk, CD, DVD. |
| | | Magnetic disk, CD, DVD. |
| 4 | December (07-12) | Introduction of Hardware & Software: its types, relationship between hardware and software |
| | | |
| | | |
| | | |
| | <u> </u> | SUNDAY - 13.12.2020 |
| | | I/O Devices |
| | December (14-19) | I/O Devices |
| | | I/O Devices |
| 5 | | |
| | | |
| | | |
| SUNDAY - 20.12.2020 | | |

| 6 | December (21-24) (26) | I/O Devices | |
|--|---------------------------------|--|--|
| | | I/O Devices | |
| | | Assignment I | |
| | | | |
| | | | |
| | | HOLIDAY - 25.12.2020 (Christmas) | |
| | ſ | SUNDAY - 27.12.2020 | |
| | | Motherboard, Ports. | |
| | December | Overview of operating system: Definition, functions of operating system | |
| 7 | (28-31) | Concept of Multiprogramming, Multitasking | |
| | January (1-2) | | |
| | | | |
| | | | |
| | | SUNDAY - 03.01.2021 | |
| | | Concept of Multithreading, Multiprocessing | |
| | | Concept of Time-sharing, Real time, | |
| 0 | January | Single-user & Multi-user Operating System, examples of various Operating | |
| 8 | (4-9) | Systems. | |
| | | | |
| | | | |
| | | SUNDAY - 10 01 2021 | |
| | | Problem Discussion | |
| | | Conditional test | |
| | | Planning the Computer Program: Concept of problem solving Problem | |
| 9 | January | definition, | |
| | (11-10) | | |
| | | | |
| | | | |
| | | SUNDAY - 17.01.2021 | |
| | | Program design, Debugging, Types of errors in programming | |
| | Ianuary | Documentation., Techniques of Problem Solving: Flowcharting | |
| 10 | (18-19) 21-23) | | |
| | | | |
| | | | |
| HOLIDAY - 20.01.2021 (Guru Gobind Singh Jayanti) | | | |
| | | SUNDAY - 24.01.2021 | |
| 11 | | Algorithms, Pseudo Code, | |
| | January (25) (27-30) | Decision table, Structured programming concepts | |
| | | Programming methodologies: Top-down and Bottomup programming | |
| | | | |
| | | | |
| HULIDAY - 20.01.2021 (KEPUDIIC Day) | | | |
| SUNDAY - 31.01.2021 | | | |

| 12 | February (01-06) | Assignment II Searching : Linear Binary Search Sorting : Selection sort | | |
|----|-----------------------|--|--|--|
| | <u> </u> | SUNDAY - 07.02.2021 | | |
| 13 | February (08-13) | Bubble Sort Insertion Sort Merging | | |
| | SUNDAY - 14.02.2021 | | | |
| 14 | February (15 - 20) | Computer Languages: Analogy with natural language, machine language Assembly language, High-level language Language Translators, Characteristics of a good programming language. | | |

SESSION 2020-2021

Weekly Lesson Plan (Odd Semester)

(Ist Semester)

Name of the Paper:- ENGLISH

CLASS : B.Sc I

Name of the Teacher : Ms. REKHA SHARMA

| WEEK | DATE | TOPICS | |
|---------------------|----------------|--|--|
| | | | |
| | | | |
| | | | |
| 1 | November | | |
| | (16-21) | | |
| | | Poem-1'Let Me Not to the Marriage of True Minds' reading | |
| | | Revision Test | |
| | | SUNDAY - 22.11.2020 | |
| | | | |
| | | | |
| | November | | |
| 2 | (23-28) | | |
| | (20 20) | | |
| | | Poem-2 'Death Be Not Proud' (Reading) | |
| | | Revision Test | |
| SUNDAY - 29.11.2020 | | | |
| | HOLIDAY - 3 | 0.11.2020 (Guru Nanak Dev Jayanti) | |
| | | | |
| | | | |
| 3 | December (1-5) | | |
| | | Poem-3 'On His Blindness' (reading) | |
| | | Revision Test | |
| | • | SUNDAY - 06.12.2020 | |
| | | | |
| | | | |
| | December | | |
| 4 | (07-12) | | |
| | | Poem-4 'The Retreat' (reading) | |
| | | Revision Test | |
| | I | SUNDAY - 13.12.2020 | |
| | | | |
| | | | |
| | December | | |
| 5 | (14-19) | | |
| | (14-13) | Deam 5 (Chadwall (Deadiae) | |
| | | roem-s snadwell (Keading) | |
| | | Revision Test | |
| | | SUNDAY - 20.12.2020 | |

| 6 | December (21-24) (26) HOLI | Prepositions DAY - 25.12.2020 (Christmas) | |
|-------------------------------------|--------------------------------------|--|--|
| | | SUNDAY - 27.12.2020 | |
| 7 | December (28-31) January (1-2) | Practice of Prepositions Common Errors | |
| SUNDAY - 03.01.2021 | | | |
| 8 | January (4-9) | Common Errors Phrasal verbs | |
| | | SUNDAY - 10.01.2021 | |
| 9 | January (11-16) | Poem-6 'Know Then Thyself' (Reading) Revision Test | |
| | | SUNDAY - 17.01.2021 | |
| 10 | January (18-19) 21-23) | Poem-7 'The Little Black Boy' (Reading) Revision Test | |
| | HOLIDAY - 20 | .01.2021 (Guru Gobind Singh Jayanti) | |
| | | SUNDAY - 24.01.2021 | |
| 11 | January (25) (27-30) | Poem-8 'Three Years She Grew in Sun and Shower' Revision Test | |
| HOLIDAY - 26.01.2021 (Republic Day) | | | |
| SUNDAY - 31.01.2021 | | | |

| 12 | February (01-06) | Poem-9 'England in 1819' Revision Test and Assignment | |
|---------------------|-----------------------|--|--|
| SUNDAY - 07.02.2021 | | | |
| 13 | February (08-13) | Poem-10 ' Crossing the Bar' Revision Test | |
| | | SUNDAY - 14.02.2021 | |
| 14 | February (15 - 20) | Practice of Translation Practice of Translation | |