

# GDC Memorial College, Bahal (Bhiwani)

NAAC Accredited Grade "B"

## Lesson Plan- January to May 2025

Name - Dr.SUMAN DEVI

Department - CHEMISTRY

Class - M.Sc.

Subject -Inorganic Chemistry - II

Semester - 2nd

Subject Code - 22CHE-201

Week-1	UNIT-1
1-Jan-25	Introduction of syllabus
2-Jan-25	Trans effect and theories of trans effect
3-Jan-25	Displacement rx in square planer complexes
4-Jan-25	Mechanism of electron transfer reactions-Outer sphere electron transfer mechanism
Week-2	
6-Jan-25	Inner sphere electron transfer mechanism
7-Jan-25	Electron exchange
8-Jan-25	Elementary theory of Magneto-chemistry
9-Jan-25	Guoy's method for determination of magnetic susceptibility
10-Jan-25	Do
Week-3	
13-Jan-25	Calculation of magnetic moments
14-Jan-25	Magnetic properties of free ions
15-Jan-25	Orbital contribution, effect of ligand field
16-Jan-25	Magnetic exchange coupling and spin state crossover
17-Jan-25	Application of magneto-chemistry in structure determination
Week-4	
20-Jan-25	Magnetic exchange coupling and spin state crossover
21-Jan-25	UNIT-2
22-Jan-25	Electronic arrangements of microstates and calculation of microstates
23-Jan-25	Do
24-Jan-25	Spectroscopic term symbols and calculation of ground state term
Week-5	
27-Jan-25	spin orbit coupling in free ions for 1st series of transition metals
28-Jan-25	Orgel diagram (d1-d9) for transition metal complexes
29-Jan-25	T.S. diagram (d1-d9) for transition metal complexes
30-Jan-25	Calculation of Dq, B and beta parameters
31-Jan-25	Effect of distortion on the d orbitals energy levels
Week-6	
3-Feb-25	Charge transfer spectra
4-Feb-25	Anomalous magnetic moments
5-Feb-25	Structural evidence from electronic spectrum
6-Feb-25	Spectrochemical and nephelauxetic series
7-Feb-25	UNIT-3
Week-7	
10-Feb-25	Valence electron count (16/18 electron rules)
11-Feb-25	violation of 18 electron count, total electron count
12-Feb-25	Metal carbonyl structure and bonding
13-Feb-25	Do
14-Feb-25	Important reactions of metal carbonyls
Week-8	
17-Feb-25	Preparation, bonding, structure and important reactions of metal nitrosyl
18-Feb-25	Tertiary phosphine as ligand
19-Feb-25	Do
20-Feb-25	UNIT-4
21-Feb-25	Structure and bonding in metal carbonyl clusters

<b>Week-9</b>	
24-Feb-25	Highers boranes
25-Feb-25	Do
27-Feb-25	Halide clusters
28-Feb-25	Structures of some binary and ternary compounds such as fluorite and antiferite
<b>Week-10</b>	
3-Mar-25	Do
4-Mar-25	Do
5-Mar-25	ReO <sub>3</sub> , Mn <sub>2</sub> O <sub>3</sub>
6-Mar-25	Corundum
7-Mar-25	Do
<b>Week-11</b>	
10-Mar-25	Do
11-Mar-25	Normal and inverse spinels
12-Mar-25	Do

<b>GDC Memorial College, Bahal (Bhiwani)</b>	
<b>NAAC Accredited Grade "B"</b>	
<b>Lesson Plan- January to May 2025</b>	
<b>Name - Dr. Anita</b>	<b>Department - Chemistry</b>
<b>Class - M.Sc (II Sem)</b>	<b>Subject &amp; Code – Physical Chemistry22CHE-202</b>
<b>Week-1</b>	<b>UNIT-1</b>
01/01/25	Introduction to Third law of thermodynamics
02/01/25	Nernst heat theorem and explanation of concept of absolute entropy.
<b>Week-2</b>	
06/01/25	Heterogeneous equilibrium
07/01/25	Phase rule, Clausius- Clapeyron Equation
08/01/25	Phase diagram for one component system (H <sub>2</sub> O & S)
09/01/25	do
<b>Week-3</b>	
13/01/25	two completely miscible components
14/01/25	do
15/01/25	two component system with congruent and incongruent melting point
16/01/25	Calculation of eutectic point
<b>Week-4</b>	
20/01/25	Question Answer
21/01/25	Take problems from student
22/01/25	Take problems from student
23/01/25	Class Test
<b>Week-5</b>	<b>UNIT-II CHEMICAL DYNAMICS</b>
27-Jan-25	Effect of temperature on reaction rates
28-Jan-25	Arrhenius equation
29-Jan-25	Collision theory of reaction rates
30-Jan-25	do
<b>Week-6</b>	
3-Feb-25	thermodynamic formulation of activated complex theory
4-Feb-25	correlation between various theories of reaction rates.
5-Feb-25	Collision theory
6-Feb-25	do
<b>Week-7</b>	
10-Feb-25	Enzymatic reaction: Michaelis – Menton treatment
11-Feb-25	Michaelis's constant for enzyme – substrate binding by Lineweaver – Burk plot
12-Feb-25	Concept of inhibition
13-Feb-25	do
<b>Week-8</b>	
17-Feb-25	Take problems from student
18-Feb-25	Take problems from student

19-Feb-25	<b>UNIT-III Statistical Mechanics:</b>
20-Feb-25	Introduction, microstates and macrostates
<b>Week-9</b>	
24-Feb-25	Thermodynamic probability & most probable distribution for Maxwell Boltzmann statistics
25-Feb-25	Bose-Einstein & Fermi Dirac statistics
27-Feb-25	Identification of the constant $\alpha$ and $\beta$
<b>Week-10</b>	
3-Mar-25	Application of Bose-Einstein statistics for a photon gas
4-Mar-25	Application of Fermi-dirac statistics, Partition function
5-Mar-25	partition function and its significance
<b>Week-11</b>	
10-Mar-25	relation between molar and molecular partition function
11-Mar-25	multiplication theorem of partition function
12-Mar-25	Thermodynamic properties in terms of partition function.
<b>Week-12</b>	
17-Mar-25	Take problems from student
18-Mar-25	Revision
19-Mar-25	Unit Test
20-Mar-25	<b>UNIT-IV Photochemistry</b>
<b>Week-13</b>	
24-Mar-25	Laws of photochemistry:
25-Mar-25	Grothus-Draper law, Stark-Einstein law of photochemical equivalence
26-Mar-25	Lambert-Beer's law
27-Mar-25	do
	do
<b>Week-14</b>	
1-Apr-25	quantum yield, quantum efficiency
2-Apr-25	reasons for high and low quantum yields, singlet and triplet state
3-Apr-25	Jablonskii diagram, photophysical processes (radiative and non-radiative)
<b>Week-15</b>	
7-Apr-25	fluorescence, phosphorescence and chemiluminescence
8-Apr-25	do
9-Apr-25	Kinetics of photophysical processes and relaxation time,
<b>Week-16</b>	
14-Apr-25	Kinetics of quenching: Stern Volmer equation
15-Apr-25	photo-oxidation, photodimerization, photochemical substitution Revision
16-Apr-25	Revision
17-Apr-25	Revision

**GDC Memorial College, Bahal (Bhiwani)****NAAC Accredited Grade "B"****Lesson Plan- January to June 2025****Name- Mr.Krishan****Department-Chemistry****Class- M.Sc (Chemistry)****Subject-Organic Chemistry-II****Semester- 2nd****Subject Code- 22CHE-203**

<b>Week-1</b>	<b>UNIT-1</b>
1-Jan-25	Learning objective and outcome
3-Jan-25	The arenium ion mechanism, orientation and reactivity,
4-Jan-25	energy profile diagrams. The ortho/para ratio, ipso attack,
<b>Week-2</b>	
7-Jan-25	orientation in other ring systems.
8-Jan-25	Diazonium coupling,
10-Jan-25	Gattermann-Koch reaction, Vilsmeier-Haack reaction,
11-Jan-25	Reimer-Tiemann reaction, Fries rearrangement
<b>Week-3</b>	
15-Jan-25	The ArSN1, ArSN2, Ben ne and SRNI mechanisms.
17-Jan-25	Reactivity — effect of substrate structure, leaving group and attacking nucleophile.
18-Jan-25	do
<b>Week-4</b>	
21-Jan-25	do
22-Jan-25	Wittig-Richter and Smiles rearrangements.
24-Jan-25	do
25-Jan-25	WRITTEN TEST
<b>Week-5</b>	<b>UNIT-2</b>
28-Jan-25	The E1, E2 and E1cB mechanisms. Orientation Effects in Elimination Reactions,
29-Jan-25	Reactivity — effects of substrate structures, attacking base,
31-Jan-25	the leaving group and the medium. Saytzeff and Hoffman rules,
1-Feb-25	Stereochemistry of E2 elimination reactions and eclipsing effects in E2 eliminations.
<b>Week-6</b>	
4-Feb-25	Mechanistic and stereochemical aspects of addition reactions involving electrophiles,
5-Feb-25	biotransformation of non-metallic inorganic compounds
7-Feb-25	nucleophiles and free radicals, regio— and chemoselectivity,
8-Feb-25	orientation and reactivity.
<b>Week-7</b>	
11-Feb-25	Hydrogenation of double and triple bonds,
12-Feb-25	do
14-Feb-25	hydrogenation of aromatic rings.
15-Feb-25	do
<b>Week-8</b>	
18-Feb-25	Hydroboration. Michael reaction.
19-Feb-25	do
21-Feb-25	Sharpless asymmetric epoxidation.
22-Feb-25	do
<b>Week-9</b>	

25-Feb-25	REVISION DAY
28-Feb-25	WRITTEN TEST
1-Mar-25	DOUBT CLASS
<b>Week-10</b>	<b>UNIT-3</b>
4-Mar-25	Reactivity of carbonyl compounds towards addition. Addition of Grignard reagents,
5-Mar-25	Organozinc and organolithium reagents to carbonyl and $\alpha$ ,
7-Mar-25	$\beta$ -unsaturated carbonyl compounds,
8-Mar-25	do
<b>Week-11</b>	
11-Mar-25	Wittig reaction. Mechanism of metal hydride reduction ( $\text{LiAlH}_4$ and $\text{NaBH}_4$ ) of
12-Mar-25	saturated and unsaturated carbonyl
<b>Week-12</b>	
18-Mar-25	esters and nitriles. Mechanism of condensation reactions
19-Mar-25	enolates — Aldol, Knoevenagel, Claisen,
21-Mar-25	Copper Enzymes — Superoxide dismutase,
22-Mar-25	Claisen, Mannich, Robinson, Reformatsky,
<b>Week-13</b>	
25-Mar-25	do
26-Mar-25	Benzoin, Perkin and Stobbe reactions. Hydrolysis of esters and amides.
28-Mar-25	do
29-Mar-25	Class test
<b>Week-14</b>	<b>UNIT-4</b>
1-Apr-25	Classification and general mechanistic treatment of nucleophilic,
2-Apr-25	do
4-Apr-25	Classification and general mechanistic treatment of nucleophilic
5-Apr-25	do
<b>Week-15</b>	
8-Apr-25	free radical and electrophilic rearrangement,
9-Apr-25	Wagner-Meerwein, Pinacol-pinacolone,
11-Apr-25	do
12-Apr-25	Benzil-benzilic acid, Favorskii, Steven,
<b>Week-16</b>	
15-Apr-25	do
16-Apr-25	Wittig, Neber, Wolff, Beckmann,
18-Apr-25	do
19-Apr-25	Hoffmann, Curtius, Lossen, Schmidt, Bayer-Villiger.
<b>Week-17</b>	
22-Apr-25	do
23-Apr-25	REVISION DAY
25-Apr-25	WRITTEN TEST
26-Apr-25	REVISION DAY
<b>Week-18</b>	
29-Apr-25	DOUBT CLASS
30-Apr-25	DOUBT CLASS
	Signature of Faculty

# GDC Memorial College, Bahal (Bhiwani)

NAAC Accredited Grade "B"

Lesson Plan- January to May 2025

Name - Dr. SUMAN DEVI

Department - CHEMISTRY

Class - M.Sc.

Subject -Inorganic Chemistry Special-IV

Semester - 2nd

Subject Code - 22CHE-401

Week-1	UNIT-1
1-Jan-25	Introduction of syllabus
2-Jan-25	Bioinorganic chemistry of Na , K , Mg <sup>2+</sup> and Ca <sup>2+</sup>
3-Jan-25	Ionophores, active transport of cations across membranes
4-Jan-25	sodium pump, Calcium pump,
Week-2	
6-Jan-25	Do
7-Jan-25	Do
8-Jan-25	Calcium carriers, Biochemistry of calcium as hormonal messenger
9-Jan-25	Muscle contraction blood clotting, neurotransmitter,
10-Jan-25	Effect of metal ions on nucleic acids,
Week-3	
13-Jan-25	Heme proteins and oxygen uptake
14-Jan-25	structure and function of hemoglobin
15-Jan-25	myoglobin, hemocyanins and hemerythin.
16-Jan-25	Do
17-Jan-25	Do
Week-4	
20-Jan-25	UNIT-2
21-Jan-25	Fixation of dinitrogen biologically and abiologically
22-Jan-25	Electron Transfer in Biological Systems Str. and function of metalloproteins in electron transport
23-Jan-25	processes-cytochromes and iron-sulphur proteins, synthetic models.
24-Jan-25	Do
Week-5	
27-Jan-25	
28-Jan-25	Hydra and oxyacids of chlorine-structure and comparison of acidic strength
29-Jan-25	Ferritin, transferrin, and siderophores,
30-Jan-25	Do
31-Jan-25	biotransformation of non-metallic inorganic compounds
Week-6	
3-Feb-25	Do
4-Feb-25	Do
5-Feb-25	Do
6-Feb-25	Nitrogenase, model for nitrogenase,
7-Feb-25	Do
Week-7	
10-Feb-25	Do
11-Feb-25	metal-N <sub>2</sub> complexes, photosynthesis and chlorophyll.
12-Feb-25	Do
13-Feb-25	UNIT-3
14-Feb-25	Zinc Enzymes — Carboxypeptidase
Week-8	
17-Feb-25	Carbonic anhydrase
18-Feb-25	alkaline phosphatase and alcohol dehydrogenase
19-Feb-25	Iron Enzymes — Catalase
20-Feb-25	Peroxidase and Cytochrome P- 450,
21-Feb-25	Copper Enzymes — Superoxide dismutase

<b>Week-9</b>	
24-Feb-25	Do
25-Feb-25	Do
27-Feb-25	blue copper electron transfer enzyme
28-Feb-25	Do
<b>Week-10</b>	
3-Mar-25	Molybdenum oxatransferase enzymes — Xanthine oxidase Coenzymes — Vitamin B 12.
4-Mar-25	Do
5-Mar-25	<b>UNIT-4</b>
6-Mar-25	Biochemical basis of essential metal deficient diseases; Iron, copper and zinc deficiencies
7-Mar-25	Therapies of diseases and Different classes of Inorganic drugs
<b>Week-11</b>	
10-Mar-25	Drugs in hypo and hyper activity of thyroids
11-Mar-25	Inorganic drugs in dental carries
12-Mar-25	Inorganic compounds as antacids

<b>GDC Memorial College, Bahal (Bhiwani)</b>	
<b>NAAC Accredited Grade "B"</b>	
<b>Lesson Plan- January to June 2025</b>	
<b>Name- Mr.Krishan</b>	<b>Department-Chemistry</b>
<b>Class - M.Sc</b>	<b>Subject - Inorganic Chemistry Special-V</b>
<b>Semester-4th sem</b>	<b>Code- 22CHE-404</b>
<b>Week-1</b>	<b>UNIT-1</b>
1-Jan-25	Spectra and symmetry, Selection rules,
2-Jan-25	Symmetry and shapes of AB <sub>2</sub> ,AB <sub>3</sub>
3-Jan-25	AB <sub>4</sub> ,AB <sub>5</sub> and AB <sub>6</sub>
4-Jan-25	modes of bonding of ambidentate ligands
<b>Week-2</b>	
8-Jan-25	ethylene diamine and diketonate complexes
9-Jan-25	changes in spectra of donor molecules on coordination
10-Jan-25	change in symmetry on coordination,bond strength frequency shift relations
11-Jan-25	Use of symmetry to determine the number of active infrared and Raman lines
<b>Week-3</b>	
15-Jan-25	Application of resonance Raman Spectroscopy particularly for the
16-Jan-25	study of active sites of metalloproteins as myoglobin and haemoglobin
17-Jan-25	Test
18-Jan-25	
<b>Week-4</b>	<b>UNIT-II</b>
22-Jan-25	<b>Nuclear Magnetic Resonance Spectroscopy:</b> <sup>19</sup> Fand <sup>31</sup> P NMR spectra
23-Jan-25	Chemical shifts,coupling constants
24-Jan-25	<sup>19</sup> F Spectra of fluoroacetone,1-bromo-1-Fluoroethane,dimethylphosphorus trifluoride and bromine pentafluoride
25-Jan-25	<sup>31</sup> P spectra of HPF <sub>2</sub> , HPO(OH) <sub>2</sub> ,H <sub>2</sub> PO(OH), cis- Pt(Pet) <sub>2</sub> Cb
<b>Week-5</b>	
29-Jan-25	Do
30-Jan-25	Application of <sup>31</sup> P NMR for structural determination of Complexes with phosphorus ligands
31-Jan-25	Spectra of Paramagnetic materials:Contact shift,its origin and application
1-Feb-25	Pseudocontact shift,Diamagnetic complexes
<b>Week-6</b>	
5-Feb-25	Spectra of free radicals, Lanthanide shift Reagents
6-Feb-25	Magnetic susceptibility Measurement.
7-Feb-25	Solid state NMR- Wide line NMR
8-Feb-25	Magnetic Angle spinning
<b>Week-7</b>	
12-Feb-25	Applications Magnetic Resonance Imaging
13-Feb-25	Do
14-Feb-25	Revision
15-Feb-25	Test
<b>Week-8</b>	<b>UNIT-III</b>
19-Feb-25	<b>Nuclear Quadrupolar Resonance(NQR) Spectroscopy:</b> Quadrupolar moment and energy levels
20-Feb-25	energy levels of a quadrupolar nucleus and effect of asymmetry parameters
21-Feb-25	Effect of an external magnetic field

22-Feb-25	selected examples for elucidation of structural aspects of inorganic compounds using NQR spectroscopy
<b>Week-9</b>	
27-Feb-25	<b>Mass Spectroscopy:</b> Presentation and interpretation of mass spectrum
28-Feb-25	effect of isotopes on appearance of mass spectrum
1-Mar-25	Applications of mass spectroscopy to inorganic compounds
<b>Week-10</b>	
5-Mar-25	fingerprint application molecular weight determination
6-Mar-25	Do
7-Mar-25	evaluation of heat of sublimation of high melting solids
8-Mar-25	Test
<b>Week-11</b>	<b>UNIT-IV</b>
19-Mar-25	<b>Molecular luminescence:</b> Fluorimetry and Phosphorimetry: Introduction, principles of fluorescence and phosphorescence
20-Mar-25	interpretation of fluorescence spectra
21-Mar-25	factors, fluorescence intensity and concentration
22-Mar-25	instrumentation for fluorimetry
<b>Week-12</b>	
26-Mar-25	applications of fluorimetry
27-Mar-25	Phosphorimetry, instrumentation
28-Mar-25	applications
29-Mar-25	comparison between fluorimetry and phosphorimetry
<b>Week-13</b>	
2-Apr-25	<b>Circular Dichroism and Optical Rotatory Dispersion:</b> Polarized light, fundamental symmetry requirements
3-Apr-25	optical activity
4-Apr-25	interaction of polarized light with optically active matter
5-Apr-25	optical rotation
<b>Week-14</b>	
9-Apr-25	Cotton effect, configuration of Tris-chelated complexes
10-Apr-25	do
11-Apr-25	do
12-Apr-25	Test
<b>Week-15</b>	
16-Apr-25	DOUBT CLASS
17-Apr-25	DOUBT CLASS
18-Apr-25	DOUBT CLASS
19-Apr-25	DOUBT CLASS
<b>Week-16</b>	
23-Apr-25	Presentation of Student
24-Apr-25	Presentation of Student
25-Apr-25	Presentation of Student
26-Apr-25	Presentation of Student
<b>Week-17</b>	
30-Apr-25	Class test

<b>GDC Memorial College, Bahal (Bhiwani)</b>	
<b>NAAC Accredited Grade "B"</b>	
<b>Lesson Plan- January to May 2025</b>	
<b>Name - Dr. Anita</b>	<b>Department - CHEMISTRY</b>
<b>Class - M.Sc.</b>	<b>Subject -Inorganic Special-VI</b>
<b>Semester - 4th</b>	<b>Subject Code - 22CHE-407</b>
<b>Week-1</b>	<b>UNIT-1</b>
1-Jan-25	Supramolecular Chemistry: Molecular recognition
2-Jan-25	Types of molecules
<b>Week-2</b>	Molecular receptors for different types of molecules
6-Jan-25	processes and carrier design
7-Jan-25	Supramolecular devices.
8-Jan-25	do
<b>Week-3</b>	
13-Jan-25	anionic substrates, recognition
14-Jan-25	do
15-Jan-25	catalysis, Transport
16-Jan-25	Supramolecular reactivity
<b>Week-4</b>	
20-Jan-25	receptor molecules and multiple recognition
21-Jan-25	do
22-Jan-25	design and synthesis of compounds
23-Jan-25	Some examples of self-assembly in supramolecular chemistry
<b>Week-5</b>	
27-Jan-25	question answer
28-Jan-25	Revision
29-Jan-25	class test
30-Jan-25	Revision
<b>Week-6</b>	<b>UNIT-2</b>
3-Feb-25	Nanomaterials Technology: Nano materials,
4-Feb-25	Properties of nano structured materials
5-Feb-25	optical, magnetic, chemical and photo catalytic properties
6-Feb-25	do
<b>Week-7</b>	
10-Feb-25	sol gel, Precipitation, Reverse Micelle
11-Feb-25	Techniques for their synthesis (Hydrothermal, Solvothermal
12-Feb-25	Synthesis, Physical Vapour deposition(PVD)

13-Feb-25	do
<b>Week-8</b>	
17-Feb-25	Chemical Vapour Deposition(CVD)
18-Feb-25	Electro deposition and Characterization of nanomaterials by
19-Feb-25	X-ray diffraction(XRD)
20-Feb-25	Energy dispersive X-ray Analysis, Microscope
<b>Week-9</b>	
24-Feb-25	Scanning Electron Microscope(SEM)
25-Feb-25	Transmission Electron Microscope
27-Feb-25	Force microscopy (AFM) techniques and application
<b>Week-10</b>	
3-Mar-25	Assignment
4-Mar-25	<b>Question Answer</b>
5-Mar-25	<b>Class test</b>
<b>Week-11</b>	<b>UNIT-3</b>
10-Mar-25	Solid State-Introduction
11-Mar-25	Defects and Non-stoichiometry:
12-Mar-25	Intrinsic and extrinsic defects- point defects
<b>Week-12</b>	
17-Mar-25	line and plane defects, colour centres,
18-Mar-25	non-stoichiometry and defects.
19-Mar-25	Thermodynamics of Schottky and Frenkel defect formation
20-Mar-25	vacancies- Schottky defects and Frenkel defects.
<b>Week-13</b>	
24-Mar-25	Metals, insulators
25-Mar-25	Structures
26-Mar-25	semiconductors
27-Mar-25	electronic structure of solids-band theory
<b>Week-14</b>	
1-Apr-25	semiconductors, doping semiconductors
2-Apr-25	p-n junctions, superconductors
3-Apr-25	bandstructure of metals, insulators and semiconductors. Intrinsic and extrinsic
<b>Week-15</b>	
7-Apr-25	Optical and Magnetic properties.
8-Apr-25	Question Answer
9-Apr-25	Revision
<b>Week-16</b>	<b>UNIT-IV</b>
14-Apr-25	Solid State-II: Solid State Laser
15-Apr-25	Ruby, YAG and tunable lasers

16-Apr-25	DO
17-Apr-25	Inorganic phospho rmaterial
<b>Week-17</b>	
21-Apr-25	Synthesis and advantagesof optical fibresover conductingfibres.
22-04-25	Alloys- interstitial,substitutional andsuper conducting
23-04-25	Meissner effect, Hume -Rothery rules
24-Apr-25	do
<b>Week 18</b>	
28-04-25	question answer
29-04-25	Revision
30-04-25	class test
	Dr. Anita
	Signature of Faculty

<b>GDC Memorial College, Bahal (Bhiwani)</b>	
<b>NAAC Accredited Grade "B"</b>	
<b>Lesson Plan- January to June 2025</b>	
<b>Name - Dr. Punita</b>	<b>Department - English</b>
<b>Class - M.Sc. Maths &amp; Chemistry</b>	<b>Subject - Communication Skills</b>
<b>Semester - 2nd</b>	<b>Subject Code - 21ENG-100</b>
<b>Week-1</b>	<b>UNIT-1</b>
20-Jan-25	Introduction of Syllabus
21-Jan-25	Human Communication: Meaning, Verbal and Non-verbal Communication
24-Jan-25	Types of Communication- Self Communication, Interpersonal Communication
<b>Week-2</b>	
27-Jan-25	Types of Communication- Small Group Communication, Mass Communication
28-Jan-25	Barriers of Communication, The Seven C's of Communication of Effective Comm.
31-Jan-25	Preparing for Interview, CV/Resume
<b>Week-3</b>	
3-Feb-25	Common Courtesies: Introducing oneself Formally, Informally & on Social Media
4-Feb-25	Making Requests, Asking for & Giving Permission, Offering Help, Giving Instructions
7-Feb-25	Art of Small Talk, Making Inquiries and Recommendations
<b>Week-4</b>	<b>UNIT-2</b>
10-Feb-25	Speaking Skills: Public Speaking- Introduction, Welcome and introductory Speech
11-Feb-25	Vote of Thanks Speech, Farewell Speech, Audience Analysis
14-Feb-25	Conversational Practice: Quitting and finding jobs, office Conversation
<b>Week-5</b>	
17-Feb-25	Conversational Practice: Conversations about College and university
18-Feb-25	Revision and queries
21-Feb-25	Test Unit 2
<b>Week-6</b>	<b>Unit 3</b>
24-Feb-25	Personality Development Skills: Personal Grooming, Assertiveness
25-Feb-25	Significance of Critical Thinking
28-Feb-25	Confidence building
<b>Week-7</b>	
3-Mar-25	SWOT Analysis
4-Mar-25	Group Discussion: Introduction
7-Mar-25	Opening and Summarising Group Discussion
<b>Week-8</b>	
10-Mar-25	Some Tips for group discussion
11-Mar-25	Revision and queries
14-Mar-25	Test of Unit 3
<b>Week-9</b>	<b>Unit 4</b>
17-Mar-25	Writing Skills: Email Writing- Guiding Principles for Composition
18-Mar-25	Writing Skills: Email Writing- Guiding Principles for Composition
21-Mar-25	Writing Skills: Email Writing- Guiding Principles for Composition
<b>Week-10</b>	
24-Mar-25	Maintaining Common etiquettes
25-Mar-25	Correspondence (personal business)
28-Mar-25	Writing: tips for good writing style
<b>Week-11</b>	

31-Mar-25	Writing Research article
1-Apr-25	Writing Research article
4-Apr-25	Writing Research article
<b>Week-12</b>	
7-Apr-25	Plagiarism
8-Apr-25	Professional Presentation: Preparing PPTs
11-Apr-25	Professional Presentation: Preparing PPTs
<b>Week-13</b>	
14-Apr-25	Delivering Presentation: Rehearsal, Body Language, handling questions
15-Apr-25	Delivering Presentation: Rehearsal, Body Language, handling questions
18-Apr-25	Delivering Presentation: Rehearsal, Body Language, handling questions
<b>Week-14</b>	
21-Apr-25	Delivering Presentation: Rehearsal, Body Language, handling questions
22-Apr-25	Delivering Presentation: Rehearsal, Body Language, handling questions
25-Apr-25	Test of Unit 4
<b>Week-15</b>	
28-Apr-25	Revision and queries
29-Apr-25	Revision and queries

<b>GDC Memorial College, Bahal (Bhiwani)</b>	
<b>NAAC Accredited Grade "B"</b>	
<b>Lesson Plan- January to May 2025</b>	
<b>Name - Mr. Ram Ghangas</b>	<b>Department - Chemistry</b>
<b>Class - M.Sc (II Sem)</b>	<b>Subject &amp; Code – Statistics, 22CHE-204</b>
<b>Week-1</b>	<b>UNIT-1</b>
1-Jan-25	Measures of Central Tendency
6-Jan-25	Mean, median and Mode
6-Jan-25	Measures of Dispersion: Range, Mean
<b>Week-2</b>	
7-Jan-25	Deviation, Standard Deviation
8-Jan-25	Coefficient of Variation
<b>Week-3</b>	
13-Jan-25	Moments, Measures of Skewness and Kurtosis
14-Jan-25	Probability Theory: Probability and its applications
15-Jan-25	do
<b>Week-4</b>	
20-Jan-25	Various Definitions of Probability
21-Jan-25	Addition Theorem
22-Jan-25	do
<b>Week-5</b>	<b>UNIT-II</b>
27-Jan-25	independent events
28-Jan-25	Multiplication Theorem, Baye's Theorem
29-Jan-25	do
<b>Week-6</b>	
3-Feb-25	Random variables: Discrete and Continuous
4-Feb-25	Random Variables; Distribution Functions and properties;
5-Feb-25	Discrete Probability distributions: Binomial, Poisson and Geometric
<b>Week-7</b>	
10-Feb-25	Continuous Probability distributions:
11-Feb-25	Normal, Gamma, Exponential and Log-Normal
12-Feb-25	do
<b>Week-8</b>	<b>Unit-III</b>
17-Feb-25	Testing of Hypotheses: Simple and Composite Hypotheses
18-Feb-25	Null and Alternative Hypotheses,
19-Feb-25	Two Types of Errors, Level of Significance,
<b>Week-9</b>	
24-Feb-25	Power of the Test, Critical Reason
25-Feb-25	Confidence Intervals
<b>Week-10</b>	
3-Mar-25	Sampling Distributions: Student's t
4-Mar-25	F-distributions and Chi-Square
5-Mar-25	Their Properties and Applications

<b>Week-11</b>	
10-Mar-25	Tests of Significance based on Chi-square (goodness of fit and independence of attributes),
11-Mar-25	t distribution and F- distribution
12-Mar-25	Analysis of Variance: one way and two way analysis of variance.
<b>Week-12</b>	<b>Unit-IV</b>
17-Mar-25	Correlation: Karl Pearson and Spearman Rank Correlation,
18-Mar-25	do
19-Mar-25	Partial and Multiple Correlations
<b>Week-13</b>	
24-Mar-25	Curve fitting: Method of Least-squares fitting,
25-Mar-25	Linear, Polynomial, arbitrary functions
26-Mar-25	R Curve, Linear Polynomial equations
<b>Week-14</b>	
7-Apr-25	Regression Analysis: Simple Regression Analysis,
8-Apr-25	Regression Lines, Regression Coefficients and its properties
9-Apr-25	do
<b>Week-15</b>	
14-Apr-25	Revision
15-Apr-25	Class test
16-Apr-25	Revision