

<b>GDC Memorial College</b>	
<b>Bahal (Bhiwani)</b>	
<b>NAAC Accredited Grade "B"</b>	
<b>Lesson Plan- Jan - April, 2025</b>	
<b>Name - Dr. Poonam Kumari</b>	<b>Department - Botany</b>
<b>Class - B.Sc. (Med.)</b>	<b>Subject - Environmental Biology-I</b>
<b>Semester - 6th</b>	<b>Subject Code - 20UBOT602A</b>
<b>Week-1</b>	<b>UNIT-I</b>
1-Jan-25	Components of Ecology
<b>Week-2</b>	
6-Jan-25	Scope and Applications
7-Jan-25	Ecosystem
8-Jan-25	Do
<b>Week-3</b>	
13-Jan-25	Food Chain
15-Jan-25	Food Web
<b>Week-4</b>	<b>UNIT-II</b>
20-Jan-25	Ecological Pyramids
21-Jan-25	Carbon Cycle
22-Jan-25	Nitrogen Cycle
<b>Week-5</b>	
27-Jan-25	Phosphorous Cycle
28-Jan-25	Sulphur Cycle
29-Jan-25	Mineral Cycle
<b>Week-6</b>	
3-Feb-25	Do
4-Feb-25	Test
5-Feb-25	Revision
<b>Week-7</b>	<b>UNIT-III</b>
10-Feb-25	Biodiversity and its Conservation
11-Feb-25	Level of Biodiversity
<b>Week-8</b>	
17-Feb-25	Hotspots of Biodiversity
18-Feb-25	Do
19-Feb-25	Flood
<b>Week-9</b>	
24-Feb-25	Endangered and Endemic Species
25-Feb-25	Drought
<b>Week-10</b>	
3-Mar-25	Earthquake
4-Mar-25	Volcano
5-Mar-25	Tsunami
<b>Week-11</b>	<b>UNIT-IV</b>
10-Mar-25	Cyclones
11-Mar-25	Ecology Management
12-Mar-25	Do
<b>Week-12</b>	
17-Mar-25	Sustainable Development
18-Mar-25	Do
19-Mar-25	Do
<b>Week-13</b>	
24-Mar-25	Forest Development
25-Mar-25	Do
26-Mar-25	Desertification
<b>Week-14</b>	
31-Mar-25	Land Reclamation
1-Apr-25	Do
2-Apr-25	Test

# GDC Memorial College Bahal (Bhiwani)

**NAAC Accredited Grade "B"**

**Lesson Plan- Jan - April, 2025**

<b>Name - Dr. Poonam Kumari</b>		<b>Department - Botany</b>	
<b>Class - B.Sc. (Med.)</b>		<b>Subject - Environmental Biology-II</b>	
<b>Semester - 6th</b>		<b>Subject Code - 20UBOT602B</b>	
<b>Week-1</b>		<b>UNIT-I</b>	
2-Jan-25	Types of Pollution		
3-Jan-25	Do		
4-Jan-25	Do		
<b>Week-2</b>			
9-Jan-25	Effects of Pollution		
10-Jan-25	Do		
11-Jan-25	Residual Toxicity		
<b>Week-3</b>			
16-Jan-25	Do		
17-Jan-25	Do		
<b>Week-4</b>		<b>UNIT-II</b>	
23-Jan-25	Green House Effect and Global Warming		
24-Jan-25	Ozone Layer Depletion		
25-Jan-25	Acid Rain		
<b>Week-5</b>			
30-Jan-25	Population Growth		
31-Jan-25	Urbanization		
<b>Week-6</b>		<b>UNIT-III</b>	
6-Feb-25	Industrilization		
7-Feb-25	Effects of Modern Agriculture Practices		
8-Feb-25	Do		
<b>Week-7</b>			
12-Feb-25	Basics of Remote Sensing		
13-Feb-25	Do		
14-Feb-25	GIS		
<b>Week-8</b>		<b>UNIT-IV</b>	
20-Feb-25	Principals of Bioremediation		
21-Feb-25	Do		
22-Feb-25	In-situ and Ex-Situ Bioremediation		
<b>Week-9</b>			
27-Feb-25	Bioremediation of Toxic Metals		
28-Feb-25	Biological Monitoring		
	Bio-indicators and Control of Environmental Pollution		
<b>Week-10</b>			

6-Mar-25	Do
7-Mar-25	Do
8-Mar-25	Xenobiotics
<b>Week-11</b>	
20-Mar-25	Test
21-Mar-25	Do
22-Mar-25	Test
<b>Week-12</b>	
27-Mar-25	Vermicomposting
28-Mar-25	Biomining- Extraction of Cu by Microbes
29-Mar-25	Au
<b>Week-13</b>	
3-Apr-25	Phytoremediation
4-Apr-25	Do
<b>Week-14</b>	
10-Apr-25	Test
11-Apr-25	Test
12-Apr-25	Revision
<b>Week-15</b>	
17-Apr-25	Test
18-Apr-25	Test
<b>Week-16</b>	
24-Apr-25	Test
25-Apr-25	Do
26-Apr-25	Do
Faculty Name	<b>Dr. Poonam Kumari</b>

# GDC Memorial College

## Bahal (Bhiwani)

NAAC Accredited Grade "B"

Lesson Plan- Jan - April, 2025

<b>Name - Dr. Poonam Kumari</b>		<b>Department - Botany</b>
<b>Class - B.Sc. (Med.)</b>		<b>Subject - Plant Physiology</b>
<b>Semester - 4th</b>		<b>Subject Code- 20UBOT401</b>
<b>Week-1</b>	<b>UNIT-I</b>	
1-Jan-25	Importance of Water ,Water Potential	
<b>Week-2</b>		
6-Jan-25	Imbibition	
7-Jan-25	Diffusion	
8-Jan-25	Osmosis	
<b>Week-3</b>		
13-Jan-25	Absorption of Water	
15-Jan-25	Do	
<b>Week-4</b>		
20-Jan-25	Transport of Water	
21-Jan-25	Root Pressure and Gutation	
22-Jan-25	Do	
<b>Week-5</b>		
27-Jan-25	Transpiration	
28-Jan-25	Factors affecting Transpiration	
29-Jan-25	Significance	
<b>Week-6</b>	<b>UNIT-II</b>	
3-Feb-25	Essential Macro and Microelemnts	
4-Feb-25	Do	
5-Feb-25	Criteria of Essentiality	
<b>Week-7</b>		
10-Feb-25	Do	
11-Feb-25	Roles of Essential Elements	
<b>Week-8</b>		
17-Feb-25	Do	
18-Feb-25	Deficiency Symptons	
19-Feb-25	Do	
<b>Week-9</b>		
24-Feb-25	Transport of Ions	
25-Feb-25	Active and Passive Transport	
<b>Week-10</b>		
3-Mar-25	Gridling Experiment	
4-Mar-25	Phloem Loading and Unloading	
5-Mar-25	Do	
<b>Week-11</b>	<b>UNIT-III</b>	
10-Mar-25	Photosynthetic Pigments	

11-Mar-25	Reaction Center
12-Mar-25	Action Spectrum
<b>Week-12</b>	
17-Mar-25	Enhancement Effect
18-Mar-25	Photosystem I & II
19-Mar-25	Factors affecting Photosynthesis
<b>Week-13</b>	
24-Mar-25	Electron Transport
25-Mar-25	ATP Synthesis & C3 cycle
26-Mar-25	C4 Cycle
<b>Week-14</b>	
31-Mar-25	Do
1-Apr-25	CAM Pathway
2-Apr-25	Do
<b>Week-15</b>	
7-Apr-25	Photorespiration
8-Apr-25	Do
9-Apr-25	Do
<b>Week-16</b>	<b>UNIT-IV</b>
14-Apr-25	Aerobic and Anaerobic Respiration Glycolysis
15-Apr-25	Do
16-Apr-25	Do
<b>Week-17</b>	
21-Apr-25	TCA
22-Apr-25	Do
23-Apr-25	Test
<b>Week-18</b>	
28-Apr-25	Do
29-Apr-25	Oxidative Phosphorylation, Respiratory Quotient
30-Apr-25	Do
<b>Week-19</b>	
28-Apr-25	Test
29-Apr-25	Test
30-Apr-25	Test
Faculty Name	<b>Dr. Poonam Kumari</b>

# GDC Memorial College Bahal (Bhiwani)

**NAAC Accredited Grade "B"**

**Lesson Plan- Jan - April, 2025**

**Name - Dr. Poonam Kumari** **Department - Botany**

**Class - B.Sc. (Med.)** **Subject - Plant Metabolism**

**Semester - 4th** **Subject Code- 20UBOT402**

<b>Week-1</b>	<b>UNIT-I</b>
2-Jan-25	Discovery and nomenclature of Enzymes
3-Jan-25	Classification
4-Jan-25	Structure And Properties
<b>Week-2</b>	
9-Jan-25	Do
10-Jan-25	Mechanism Of Enzyme Catalysis
11-Jan-25	Do
<b>Week-3</b>	
16-Jan-25	Enzyme Inhibition
17-Jan-25	Do
<b>Week-4</b>	<b>UNIT-II</b>
23-Jan-25	Lipid Classification
24-Jan-25	Saturated and Unsaturated Fatty Acids
25-Jan-25	Lipid Biosynthesis
<b>Week-5</b>	
30-Jan-25	Beta Oxidation
31-Jan-25	Glyoxalate Cycle
	Biological nitrogen Fixation
<b>Week-6</b>	
6-Feb-25	Nitrate and Ammonia Assimilation
7-Feb-25	Do
8-Feb-25	Do
<b>Week-7</b>	<b>UNIT-III</b>
12-Feb-25	Discovery of Auxins
13-Feb-25	Physiological Roles
14-Feb-25	Gebberellins
<b>Week-8</b>	
20-Feb-25	Cytokinins
21-Feb-25	Do
22-Feb-25	Ethylene and ABA
<b>Week-9</b>	<b>UNIT-IV</b>
27-Feb-25	Phases of growth and Development
28-Feb-25	Do
<b>Week-10</b>	

6-Mar-25	Photoperiodism
7-Mar-25	Do
8-Mar-25	Do
<b>Week-11</b>	
20-Mar-25	Physiology of Flowering
21-Mar-25	Do
22-Mar-25	Do
<b>Week-12</b>	
27-Mar-25	Florigen
28-Mar-25	Do
29-Mar-25	Do
<b>Week-13</b>	
3-Apr-25	Fruit Ripening
4-Apr-25	Photoperiodism
<b>Week-14</b>	
10-Apr-25	Do
11-Apr-25	Phytochrome
12-Apr-25	Morphology
<b>Week-15</b>	
17-Apr-25	Vernalisation
18-Apr-25	Physiology of inflorescence
<b>Week-16</b>	
24-Apr-25	Revision
25-Apr-25	Do
26-Apr-25	Do
Faculty Name	<b>Dr.Poonam Kumari</b>

# GDC Memorial College

## Bahal (Bhiwani)

NAAC Accredited Grade "B"

Lesson Plan- Jan - April, 2025

<b>Name - Dr. Poonam Kumari</b>		<b>Department - Botany</b>
<b>Class - B.Sc. (Med.)</b>		<b>Subject- Mushroom Culture Technology</b>
<b>Semester - 6th</b>		<b>Subject Code- 20SECB604</b>
<b>Week-1</b>	<b>UNIT-I</b>	
1-Jan-25	History of Mushroom	
3-Jan-25	Nurtional Value of Mushroom	
4-Jan-25	Medicinal Value	
<b>Week-2</b>		
8-Jan-25	Do	
10-Jan-25	Poisonous Mushrooms	
11-Jan-25	Do	
<b>Week-3</b>		
15-Jan-25	Do	
17-Jan-25	Edible Mushrooms	
<b>Week-4</b>		
22-Jan-25	Do	
24-Jan-25	Do	
25-Jan-25	Do	
<b>Week-5</b>	<b>UNIT-II</b>	
29-Jan-25	Substrate Polythene Bags	
31-Jan-25	Do	
<b>Week-6</b>		
5-Feb-25	Do	
7-Feb-25	Pure Culture	
8-Feb-25	Do	
<b>Week-7</b>		
12-Feb-25	Medium Sterilization	
14-Feb-25	Preperation of spawn	
15-Feb-25	Mushroom Bed preparation	
<b>Week-8</b>		
19-Feb-25	Factors affecting Bed Preparation	
21-Feb-25	Do	
22-Feb-25	Composting Technology	
<b>Week-9</b>		
28-Feb-25	Do	
<b>Week-10</b>	<b>UNIT-III</b>	
5-Mar-25	Short Term Storage	
7-Mar-25	Long Term Storage	
8-Mar-25	Drying	
<b>Week-11</b>		

12-Mar-25	Storage
<b>Week-12</b>	
19-Mar-25	Nutrition
21-Mar-25	Proteins
22-Mar-25	Carbohydrates
<b>Week-13</b>	<b>UNIT-IV</b>
26-Mar-25	Types Of Food Prepared from Mushroom
28-Mar-25	Do
29-Mar-25	Resarch Centers
<b>Week-14</b>	
2-Apr-25	Do
4-Apr-25	Export Value
<b>Week-15</b>	
9-Apr-25	Do
11-Apr-25	Revision
12-Apr-25	Revision
<b>Week-16</b>	
16-Apr-25	Test
18-Apr-25	Test
<b>Week-17</b>	
23-Apr-25	Revision
25-Apr-25	Do
26-Apr-25	Do
<b>Week-18</b>	
30-Apr-25	Test
Faculty Name	<b>Dr. Poonam Kumari</b>

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## Bahal (Bhiwani)

NAAC Accredited Grade "B"

### Lesson Plan- Jan - April, 2025

<b>Name - Dr. Poonam Kumari</b>	<b>Department - Botany</b>
<b>Class - B.Sc. (Life Sciences)</b>	<b>Subject - Cell Biology &amp; Genetics</b>
<b>Semester - 2nd</b>	<b>Subject Code - 24UN-BOT-201</b>
<b>Week-1</b>	<b>UNIT-I</b>
1-Jan-25	Structure and Fuction of Cell wall
2-Jan-25	Do
3-Jan-25	Do
<b>Week-2</b>	
6-Jan-25	Plasma Membrane
8-Jan-25	Do
9-Jan-25	Golgi Apparatus
10-Jan-25	Do
<b>Week-3</b>	
13-Jan-25	Endoplasmic Reticulum
15-Jan-25	Lysosomes
16-Jan-25	Peroxisomes
17-Jan-25	Vacoules
<b>Week-4</b>	
20-Jan-25	Chloroplast
22-Jan-25	Do
23-Jan-25	Mitochondria
24-Jan-25	Do
<b>Week-5</b>	
27-Jan-25	Nucleus
29-Jan-25	Do
30-Jan-25	Nucleolus
31-Jan-25	Do
<b>Week-6</b>	<b>UNIT-II</b>
3-Feb-25	Mitosis
5-Feb-25	Do
6-Feb-25	Do
7-Feb-25	Meiosis
<b>Week-7</b>	
10-Feb-25	Do
12-Feb-25	Do
13-Feb-25	Significance
14-Feb-25	Test
<b>Week-8</b>	
17-Feb-25	Chromosome Morphology

19-Feb-25	Test
20-Feb-25	Deletion
21-Feb-25	Do
<b>Week-9</b>	
24-Feb-25	Duplication
27-Feb-25	Translocations
28-Feb-25	Do
<b>Week-10</b>	
3-Mar-25	Inversions
5-Mar-25	Aneuploidy
6-Mar-25	Polyploidy
7-Mar-25	Do
<b>Week-11</b>	
10-Mar-25	Sex Determination in plants
12-Mar-25	Do
<b>Week-12</b>	<b>UNIT-III</b>
17-Mar-25	Mendelism
19-Mar-25	Law Of Segregation
20-Mar-25	Do
21-Mar-25	Law of Independent Assortment
<b>Week-13</b>	
24-Mar-25	Do
26-Mar-25	Linkage And Crossing over
27-Mar-25	Do
28-Mar-25	Allelic And Non-Allelic Interactions
<b>Week-14</b>	
31-Mar-25	Do
2-Apr-25	Do
3-Apr-25	Test
4-Apr-25	Do
<b>Week-15</b>	<b>UNIT-IV</b>
7-Apr-25	Presence and Function of Mitochondrial DNA
9-Apr-25	Do
10-Apr-25	Presence and Function of Plastid DNA
11-Apr-25	Do
<b>Week-16</b>	
14-Apr-25	Plasmid
16-Apr-25	Genetic Variations
17-Apr-25	Do
18-Apr-25	Test
<b>Week-17</b>	
21-Apr-25	Mutations
23-Apr-25	Do
24-Apr-25	Do
25-Apr-25	Test

<b>Week-16</b>	
28-Apr-25	Frame Shift Mutation
30-Apr-25	Do
Faculty Name	<b>Dr. Poonam Kumari</b>