**DR. ANJU TANWAR**

**WEEK WISE LESSON PLAN by DR. ANJU TANWAR**

 **CLASS AND SECTION: B.Sc. MEDICAL, VIth  Sem, SUBJECT: BOTANY**

**WEEK WISE LESSON PLAN FOR THE MONTH FEBRUARY**

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| **Weeks** | **Topics** |
| **1** | - |
| **2** | Discovery of EnzymesNomenclature of EnzymesCharacteristics of EnzymesAudio-visual demonstration of topics |
| **3** | Concept of Holoenzyme and ApoenzymeConcept of coenzyme and cofactorMechanism of enzyme actionSeminar/ Power point presentation and discussion |
| **4** | Regulation of enzyme activityGrowth and Development Phases of growth and developmentGeneral introduction to plant Hormones Discovery and mechanism of action of Auxins |
| **5** | Discovery and mechanism of action of Gibberellins Discovery and mechanism of action of CytokininDiscovery and mechanism of action of Absicic acid and Ethylene |

**WEEK WISE LESSON PLAN FOR THE MONTH MARCH**

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| **Week** | **Topics** |
| **1** | - |
| **2** | **HOLI VACATIONS** |
| **3** | Photomorphogenesis Structure and functions ofLipidsSynthesis of Fatty acids |
| **4** | Beta oxidation of FatsSaturated and unsaturated FatsStorage and Mobilization of Fatty acids |
| **5** | Introduction to Nitrogen FixationBiology of Nitrogen FixationNitrate Reductase: Importance and Regulation |

**WEEK WISE LESSON PLAN FOR THE MONTH APRIL**

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| **Week** | **Topics** |
| **1** | - |
| **2** | Ammonium assimilation in Plants Nitrate reduction and Nitrite reductionAmmonium assimilation in Plants Ammonia formation and incorporation Ammonia incorporation |
| **3** | General outline of DNA Recombinant TechnologyTools used in DNA Recombinant Technology Vectors And Enzymes |
| **4** | Basic steps used in DNA Recombinant TechnologyTypes of Cloning |
| **5** | Test |

**WEEK WISE LESSON PLAN FOR THE MONTH MAY**

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| **Week** | **Topics** |
| **1** | Genomic Libraryc-DNA LibraryTransposable elements |
| **2** | Cellular TotipotencyDifferentiation of plant tissue culture Dedifferentiation Re-differentiation |
| **3** | Biology of *Agrobacterium* *Agrobacterium* mediated gene transfer Various steps Various vectors utilized for gene delivery |
| **4** | Marker genesAspects of Plant Tissue CultureTissue culture Laboratory visit |
| **5** | Revision of the whole syllabus * Through audio-visual practice
* Diagram practice, Specimen and slide study
* Group discussion,Seminars and power point presentations
* Oral and written tests
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