|  |  |  |  |
| --- | --- | --- | --- |
| Sr. no. | Week | Date | topic |
| 1 | 1st | 31-01-2024 to 03-02-2024 | Basics of Enzymology: Discovery and nomenclature; characteristics of enzymes |
| 2 | 2nd | 05-02-2024 to 10-02-2024 | concept of holoenzyme, apoenzyme, coenzyme and co-factors; regulation of enzyme activity; mechanism of action. |
| 3 | 3rd | 12-02-2024 to 17-02-2024 | Growth and development: Definitions; phases of growth and development; Plant hormones- auxins, gibberellins, cytokinins, abscissic acid and ethylene, |
| 4 | 4th | 19-02-2023 to 24-02-2024 | history of their discovery, mechanism of action; photo-morphogenesis; |
| 5 | 5th | 26-02-2024 t0 02-03-2024 | phytochromes and their discovery, physiological role and mechanism of action |
| 6 | 6th | 04-03-2024 to 09-03-2024 | Lipid metabolism: Structure and functions of lipids; fatty acid biosynthesis; B-oxidation; |
| 7 | 7th | 11-03-2024 to 16-03--2024 | saturated and unsaturated fatty acids; storage and mobilization of fatty acids. |
| 8 | 8th | 18-03-2024 to 22-03-2024 | Nitrogen metabolism: Biology of nitrogen fixation |
|  |  | 23-03-2024 TO 27-03-2024 | University vacations |
| 9 | 9th | 28-03-2024 to 30-03-2024 | ; importance of nitrate reductase and its regulation; ammonium assimilation.; |
| 10 | 10th | 01-04-2024 to 06-04-2024 | Genetic engineering and Biotechnology: Tools and techniques of recombinant DNA technology |
| 11 | 11th | 08-04-2024 to 13-04-2024 | cloning vectors; genomic and cDNA library; transposable elements; aspects of plant tissue culture; |
| 12 | 12th | 15-04-2024 to 20-04-2024 | cellular totipotency, differentiation and morphogenesis; biology of Agro-bacterium; vectors for gene delivery and marker genes |
| 13 | 13th | 22-04-2024 to 27-04-2024 | Morphology of plant part used, brief idea of cultivation and uses of the following: Spices- Coriander, Ferula, Ginger, Turmeric, Cloves. |
| 14 | 14th | 29-04-2024to 04-05-2024 | Medicinal Plants- Cinchona, Rauwolfia, Atropa, Opium, Cannabis, Neem. Botanical description and processing of: Beverages- Tea and Coffee. |
| 15 | 15th | 06-05-2024 to 11-05-2024 | Rubber- Hevea. Sugar- Sugarcane. General account and sources of timber; energy plantations and bio-fuels. |
| 16 | 16th | 13-05-2024 to 15-05-2024 | revision |