

Teaching plan (session 2022-2023)

Class : BSc 1 Sem: I

Subject botany

Paper :1

| Sr.no | Date               | Topics to be covered  |
|-------|--------------------|---|
| 1     | 30.8.22– 14.9.22   | General character, classification replication of viruses and importance         |
| 2     | 19.9.22--28.9.22   | Mycoplasma, Bacteria: classification , reproduction                             |
| 3     | 4.10.22--12.10.22  | nutrition type of bacteria and importance of bacteria,                          |
| 4     | 17.10.22--31.10.22 | Test of topics covered Oscillatoria, kingdom chromista: Albugo and Phytophthora |
| 5     | 1.11.22--7.11.22   | Kingdom zygomycota :Mucor   |
| 6     |                    | Kingdom Ascomycota : Saccharomyces, Pencillium , Peziza                         |
| 7     | 9.11.23--12.11.22  | MST   |
| 8     | 13.11.22- 15.11.22 | Puccinia ,Ustilago , Agaricus,  |
| 9     | 21.11.22--30.11.22 | Creospora ,colletotrichum,  |
| 10    | 5.12.22--13.12.22  | lichens   |
| 11    | 14.12.22--20.12.22 | TESTS AND GROUP DISCUSSION OF TOPICS COVERED                                    |

SIGNATURE

## Teaching plan (session 2022-2023)

Class: BSc 1 Sem: II

Subject botany

Paper: III

| Sr.no | Date               | Topics to be covered   |
|-------|--------------------|--|
| 1     | 22.8.22--31.8.22   | General structure of cell, structure and function of nucleus,                      |
| 2     | 1.9.22 –9.9.22     | Ultrastructure of nuclear membrane, nuclear pore, nucleolus                        |
| 3     | 10.9.22--16.9.22   | structure and function of cell organelles : mitochondria, plastids and ribosomes   |
| 4     | 19.9.22--22.9.22   | Tests of covered topics  |
| 5     | 23.9.22--29.9.22   | structure and function of cell organelles: Golgi bodies, ER ,peroxisomes, vacuoles |
| 6     | 4.10.22--12.10.22  | Extranuclear genome: presence and function of mitochondrial and plastid DNA        |
| 7     | 13.10.22--17.10.22 | Chromosome organization: morphology ,centrosome and telomere                       |
| 8     | 13.10.22-17.10.22  | Chromosome alterations   |
| 9     | 18.10.22-27.10.22  | Variations in chromosome number(aneuploidy and polyploidy) sex chromosome          |
| 10    | 31.10.22-2.11.22   | Cell envelope: structure,composition and function of cell wall                     |
| 11    | 9.11.22–12.11.22   | MST  |

|    |                    |   |
|----|--------------------|---|
|    |                    |   |
| 12 | 14.11.22–21.11.22  | structure ,composition and function of plasma membrane in microbes and plants |
| 13 | 24.11.22--30.11.22 | Revision of topics covered  |

signature

Teaching plan (session 2022-2023)

Class : BSc II Sem: III

Subject botany

Paper: V

| Sr.no | Date                | Topics to be covered   |
|-------|---------------------|--|
| 1     | 22.8.22--31.8.22    | GYMNOSPERM: General feature , classification   |
| 2     | 1.9.22–9.9.22       | fossil gymnosperms: Pentoxylon, Cordaites  |
| 3     | 10.9.22--16.9.22    | Test of topics covered   |
| 4     | 19.9.22--22.9.22    | fossil gymnosperms: Bennettites, Glossopteris  |
| 5     | 23.9.22--29.9.22    | Lyginopteris ,Williamsonia   |
| 6     | 4.10.22--12.10.22   | Distribution ,cytology and economic importance of indian gymnosperms                             |
| 7     | 13.10.22--17.10.22  | General characters of pro Gymnosperms, morphological features of Arachaeopteris and Aneurophyton |
| 8     | 18.10.21--27.10.22  | Cycas and Pinus morphology, anatomy  |
| 9     | 31.10.22–6.11.22    | Cycas and Pinus reproduction and life cycle  |
| 10    | 9.11.22-12.11.22    | MST  |
| 11    | 14.11.22--22.11.22  | Epedera and Gnetum : Morphology anatomy  |
| 12    | 16.11.22--24.11. 22 | Epedera and Gnetum: Reproduction and life cycle  |
| 13    | 26.11.22-30.11.22   | Revision of topics covered   |

SIGNATURE

Teaching plan (session 2022-2023)

Class: BSc III Sem: V

Subject botany

Paper: VII

| Sr.no | Date            | Topics to be covered  |
|-------|-----------------|---|
| 1     | 7.2.23-13.2.23  | TISSUE System: epidermal structure and type of stomata  |
| 2     | 14.2.23-23.2.23 | Idioblasts, trichomes, nectaries, hydathodes  |
| 3     | 24.2.23-25.2.23 | Fundamental parenchyma: parenchyma,   |
| 4     | 1.3.23-6.3.23   | collenchymas and sclerenchyma   |
| 5     | 8.3.23-10.3.23  | Test of topic done  |
| 6     | 11.3.23-16.3.23 | Vascular system   |
| 7     | 17.3.23-23.3.23 | The root system; the root apical meristem and its histological organisation                       |
| 8     | 24.3.23-31.3.23 | Test of topic done  |
| 9     | 1.4.23-10.4.23  | Anatomical detail of dicot and monocot root   |
| 10    | 12.4.23-17.4.23 | The shoot system: the shoot apical meristem and its histological organisation                     |
| 11    | 19.4.23-22.4.23 | Anatomical detail of dicot and monocot root, Cambium and its function, Anomalous secondary growth |
| 12    | 24.4.23-29.4.23 | MST   |
| 13    | 30.4.23- 2.5.23 | Leaf : Anatomical detail of dicot and monocot leaf ,leaf modification and their functions         |

Signature

Teaching plan (session 2022-2023)

Class: BSc : I Sem: V

Subject botany

Paper: X

| Sr.no | Date              | Topics to be covered  |
|-------|-------------------|---|
| 1     | 22.8.22-31.8.22   | Growth ,Phases of growth , growth kinetics  |
| 2     | 1.9.22-9.9.22     | Plant hormones: discovery and bioassay of hormones  |
| 3     | 10.9.22-16.9.22   | Plant hormones: physiological effects and application of Auxin and Gibberellins                               |
| 4     | 19.9.22-22.9.22   | Plant hormones: physiological effects and application of cytokinin and abscisic acid and ethylene             |
| 5     | 23.9.22-29.9.22   | Tests of covered topics   |
| 6     | 4.10.22-12.10.22  | Photo morphogenesis, discovery ,structure and physiological effect and role of phytochrome and cryptochrome   |
| 7     | 13.10.22-17.10.22 | Photoperiodism,Vernalization,Tissue culture,anther and embryo culture   |
| 8     | 18.10.22-27.10.22 | Role of biotechnology in human welfare particular reference to industry, Plant breeding and molecular farming |
| 9     | 31.10.22-7.11.22  | , techniques  |
| 10    | 9.11.22-12.11.22  | MST   |
| 11    | 14.12.22-22.11.22 | PCR,Cloning vectors,Genomic and cDNA library,Gel electrophoresis, southern blotting                           |

signature

Teaching plan (session 2022-2023)

Class: BSc III Sem: V

Subject botany

Paper: XI

| Sr.no | Date            | Topics to be covered   |
|-------|-----------------|--|
| 1     | 7.2.23-13.2.23  | Concept of ecology and its scope, Environmental factors: climatic, edaphic factors                                     |
| 2     | 14.2.23-23.2.23 | TOPOGRAPHIC AND Biotic Factor, Shelfords Law Of Tolerance  |
| 3     | 24.2.23-25.2.23 | Population Ecology, Positive And Negative Interaction, Growth Forms, Carrying Capacity Ecotypes And Ecads              |
| 4     | 1.3.23-6.3.23   | Community Ecology, Ecological Succession, Gause Principle Of Competitive Exclusion                                     |
| 5     | 8.3.23-10.3.23  | Ecosystem Ecological Pyramids, Food Chains, food web   |
| 6     | 11.3.23-16.3.23 | Ecological Energetics And Productivity   |
| 7     | 17.3.23-23.3.23 | Environmental Issues: Air Water Noise And Soil Pollution   |
| 8     | 24.3.23-31.3.23 | Global Warming And Ozone Depletion   |
| 9     | 1.4.23-10.4.23  | International Efforts For Mitigation Of Global Climate Change  |
| 10    | 12.4.23-17.4.23 | Biodiversity : Introduction And Importance Of Biodiversity ,Elements Of Biodiversity energetics Species And Ecological |
| 11    | 19.4.23-22.4.23 | Conservation Strategy ,Concept Of Hot Spot, Biomes, Phytogeographic Regions Of India, Vegetation Types                 |
| 12    | 24.4.23-29.4.23 | MST  |
|       | 30.4.23- 2.5.23 | Ecological Adaptation In Xerophytes, Hydrophytes And Halophytes, Biogeochemical Cycles                                 |

Signature