(DBOT 21)

ASSIGNMENT-1

M.Sc. DEGREE EXAMINATION, JUNE 2022.

Second Year

Botany

DEVELOPMENT BIOLOGY OF ANGIOSPERMS AND ETHNOBOTANY

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

1. Apomixis
2. Development of fruit
3. Root-stem transition
4. Xylem
5. Scope of Ethnobotany
6. Anatomy of leaf.
7. Tribal rights
8. Cultivated medicinal plants in Guntur and Prakasam dts.

(DBOT 21)

ASSIGNMENT-2

M.Sc. DEGREE EXAMINATION, JUNE 2022.

Second Year

Botany

DEVELOPMENT BIOLOGY OF ANGIOSPERMS AND ETHNOBOTANY

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

1. (a) Describe the structure and development of endosperm.

   (b) Give an account of male gametophyte.

2. (a) Describe the anomalous secondary growth in monocot stem.

   (b) Describe the anatomy of a xerophytic leaf.

3. (a) Trace the history of traditional medicine in India.

   (b) Explain the significance of sacred groves.

4. (a) Explain the present status of ethnobotanical research in India and its significance.

   (b) How do you evaluate the medicinal plants used by tribals scientifically?

(DBOT 22)

ASSIGNMENT-1

M.Sc. DEGREE EXAMINATION, JUNE 2022.

Second Year

Botany

MICROBIOLOGY, MYCOLOGY AND PLANT DISEASES

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

1. Ultra structure of bacterial cell
2. Classification of viruses
3. Status of fungi
4. Zygomycotina
5. Pathogenic virus
6. Plant disease indexing
7. Powdery mildew of cucurbits
8. Biological control of plant diseases.

(DBOT 22)

ASSIGNMENT-2

M.Sc. DEGREE EXAMINATION, JUNE 2022.

Second Year

Botany

MICROBIOLOGY, MYCOLOGY AND PLANT DISEASES

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

1. (a) What role did bacteria play in carbon and phosphorus cycles?

   (b) Give an account of nutritional types in bacteria.

2. (a) How do you justify kingdom for Mycetae?

   (b) Give a general account of Deuteromycotina.

3. (a) Classify plant diseases with suitable examples.

   (b) Trace the entry and establishment of pathogens.

4. (a) Describe the principles of disease control.

   (b) Describe the symptoms, etiology, epidemiology and control of Citrus canker.

(DBOT23)

ASSIGNMENT-1

M.Sc. DEGREE EXAMINATION, JUNE 2022.

Second Year

Botany

CELL BIOLOGY AND MOLECULAR BIOLOGY

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

1. Structure of chloroplast
2. Endoplasmic reticulum
3. Phase contrast microscope
4. Principle of Electron microscope
5. Gene concept
6. DNA as genetic material
7. Translation
8. DNA replication

(DBOT23)

ASSIGNMENT-2

M.Sc. DEGREE EXAMINATION, JUNE 2022.

Second Year

Botany

CELL BIOLOGY AND MOLECULAR BIOLOGY

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

1. (a) Describe the structure of plasma membrane.

   (b) Describe the structure and functions of mitochondria.

2. (a) Give an account of cell signalling and signal transduction.

   (b) Give an over view of transposable elements.

3. (a) Give an account of genetics of bacteria.

   (b) Describe the fine structure of gene.

4. (a) Describe the physical and chemical structure of DNA.

   (b) Enumerate the salient features of gene regulation in eukaryotes.

(DBOT 24)

ASSIGNMENT-1
M.Sc. DEGREE EXAMINATION, JUNE 2022.
Second Year
Botany
PLANT BIOTECHNOLOGY
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. Production of haploids
2. Concept of biotechnology
3. Synthetic seeds
4. Protoplast fusion
5. Genomic libraries
6. PCR
7. Agrobacterium mediated gene transfer
8. Direct gene transfer methods.

(DBOT 24)

ASSIGNMENT-2
M.Sc. DEGREE EXAMINATION, JUNE 2022.
Second Year
Botany
PLANT BIOTECHNOLOGY
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. (a) Give an account of techniques used in plant tissue culture.
   (b) Give an account of meristem culture.
2. (a) How do you produce secondary metabolites?
   (b) Describe the production of cybrids.
3. (a) Describe the molecular analysis of DNA by blotting techniques.
   (b) Give an account of gene cloning vectors.
4. (a) Explain the role of RFLP and RAPD in crop improvement.
   (b) What are the contributions of biotechnology in industry?