(DBOT21)

ASSIGNMENT - 1

M.Sc. DEGREE EXAMINATION, MARCH,2023.
Second Year
Botany
DEVELOPMENT BIOLOGY OF ANGIOSPERMS
AND ETHNOBOTANY

MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

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1. Polyembryony
2. Helobial endosperm
3. Shoot apex
4. Phloem
5. Sacred groves of coastal A.P.
6. Ethnology of Yerukula

ASSIGNMENT - 2

M.Sc. DEGREE EXAMINATION, MARCH,2023.
Second Year
Botany
DEVELOPMENT BIOLOGY OF ANGIOSPERMS
AND ETHNOBOTANY

MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. *Rauvolfia serpentine*

2. *Withania somnifera*

3. (a) Give an account of female gametophyte.
   (b) Describe the development of fruit.

4. (a) Describe the anomalous secondary growth in dicot stem.
   (b) Describe the anatomy of root-stem transition.

5. (a) Trace the development of traditional medicine in India.
   (b) What strategies do you recommend for conservation of sacred groves?

6. (a) Explain the importance of pytochemicals in modern medicine.
   (b) Explain the present position of ethnobotanical research in Andhra Pradesh.

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(DBOT22)

ASSIGNMENT - 1

M.Sc. DEGREE EXAMINATION, MARCH,2023.
Second Year
Botany
MICROBIOLOGY, MYCOLOGY AND
PLANT DISEASES

MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Ultra structure of bacterial cell
2. Heterotrophs
3. Economic importance of fungi
4. Classification of fungi
5. Plant disease forecasting
6. Phytoalexins

(DBOT22)

ASSIGNMENT - 2

M.Sc. DEGREE EXAMINATION, MARCH,2023.
Second Year
Botany
MICROBIOLOGY, MYCOLOGY AND
PLANT DISEASES

MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Little leaf of brinjal

2. Citrus canker

3. (a) Describe the role of bacteria in nitrogen cycle.
   (b) Give an account of plant viruses, transmission and control.

4. (a) Give a general account of Ascomycotina.
   (b) Describe the cultivation of mushrooms.

5. (a) Describe the symptoms caused by plant pathogenic fungi, bacteria and viruses.
   (b) Describe the dispersal of plant pathogens.

6. (a) Describe the symptoms, etiology, epidemiology and control of clubroot of crucifers.
   (b) Describe the principles of biological control of plant diseases.

(DBOT23)

ASSIGNMENT - 1

M.Sc. DEGREE EXAMINATION, MARCH,2023.

Second Year

Botany

CELL BIOLOGY AND MOLECULAR BIOLOGY

MAXIMUM : 30 MARKS

ANSWER ALL QUESTIONS

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1. Plasma membrane
2. Mitochondria
3. Uses of SEM
4. Fluorescence microscope
5. Conjugation
6. Structure of gene
7. Transcription

(DBOT23)

ASSIGNMENT - 2

M.Sc. DEGREE EXAMINATION, MARCH,2023.

Second Year

Botany

CELL BIOLOGY AND MOLECULAR BIOLOGY

MAXIMUM : 30 MARKS

ANSWER ALL QUESTIONS

1. Gene regulation in eukaryotes

2. (a) Describe the structure and functions of lysomes.

   (b) Describe the structure and functions of endoplasmic reticulum.

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

   (b) Give an account of cell signaling and transduction.

4. (a) How do you prove DNA as genetic material?

   (b) Describe the evolution of gene concept.

5. (a) Enumerate the salient features of DNA repair mechanisms.

   (b) Describe genetic code.

(DBOT24)

ASSIGNMENT - 1

M.Sc. (Final) DEGREE EXAMINATION MARCH, 2023.
Second Year
Botany
PLANT BIOTECHNOLOGY

MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Scope of biotechnology.
2. Micropropagation.
3. Cybrids.
4. Cell suspension.
5. Vectors.
6. Blotting techniques.

ASSIGNMENT - 2

M.Sc. (Final) DEGREE EXAMINATION, MARCH, 2023.
Second Year
Botany
PLANT BIOTECHNOLOGY

MAXIMUM : 30 MARKS

ANSWER ALL QUESTIONS

1. RFLP

2. RAPD

3. (a) How do you establish a tissue culture laboratory?
   (b) Describe the selection of mutants in vitro for biotic and abiotic stress.

4. (a) Give an account of somatic embryogenesis and synthetic seeds.
   (b) Describe protoplast fusion and somatic hybridization.

5. (a) Give an account of genomic and c-DNA libraries.
   (b) Describe the amplification of DNA by polymerase chain reaction.

6. (a) Give an account of direct gene transfer methods.
   (b) Explain the role of biotechnology in industry.

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