(DBOT 21)

Assignment 1

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

Paper V — DEVELOPMENTAL BIOLOGY OF ANGIOSPERMS AND ETHNOBOTANY

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

1. Tapetum
2. Apomixis
3. Meristem
4. Root
5. Ethnobotany and its concept
6. Sacred groves in Guntur and Prakasam districts
7. Ethnology of Yerukula tribe
8. Scientific evaluation of medicinal plants.

(DBOT 21)

Assignment 2

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

Paper V — DEVELOPMENTAL BIOLOGY OF ANGIOSPERMS AND ETHNOBOTANY

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

1. Describe the process of fertilization.
2. Give an account of female gametophyte.
3. Describe the anomalous secondary growth in monocot stem.
4. Give an account of anatomy of leaf.
5. Explain the role of ethnobotany in developing modern medicine.
6. What are sacred groves? How do you conserve them? What are their significance?
7. Describe the major medicinal plants cultivated in Andhra Pradesh.
8. Explain the role of phytochemicals in modern medicine.

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(DBOT 22)

Assignment 1

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

Paper VI— MICROBIOLOGY, MYCOLOGY AND PLANT DISEASES

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

1. Transmission of viruses.
2. Heterotrophs
3. Classification of fungi
4. Masticomycotina
5. Establishment of pathogens
6. Plant disease indexing
7. RTV
8. Etiology of club root of Crucifers

(DBOT 22)

Assignment 2

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

Paper VI— MICROBIOLOGY, MYCOLOGY AND PLANT DISEASES

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

1. Explain the role of bacteria in phosphorus cycle.
2. Describe the morphology and ultra structure of bacteria cell.
3. Give a general account of Ascomycotina.
4. Distinguish between Basidiomycotina and Deuteromycotina.
5. Explain the role of enzymes, toxins and phytoalexins in pthogenesis.
6. Describe the factors affecting the out break of plant diseases and add a note on forecasting.
7. Describe the symptoms, etiology, epidemiology and control of damping off vegetables.
8. Describe citrus canker and brown rot of potato.

(DBOT 23)

Assignment 1

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

PAPER VII — CELL BIOLOGY AND MICROBIOLOGY

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

1. Plasma membrane
2. Vacuole
3. Genetics of cancer
4. Transposable elements
5. Conjugation
6. Evolution of gene concept
7. Chemical structure of DNA
8. Eukaryotic gene expression.

(DBOT 23)

Assignment 2

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

PAPER VII — CELL BIOLOGY AND MICROBIOLOGY

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

1. Describe the structure and functions of endoplasmic reticulum.
2. Describe the structure and functions of lysosomes.
3. Give an account of various microscopes studied by you.
4. Describe cell signalling and signal transduction.
5. Describe the genetic recombination in phage.
6. Describe the experiment proving DNA as genetic material.
7. Give an account of genetic code.
8. Describe the replication of DNA.

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(DBOT 24)

Assignment 1

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

Paper VIII : PLANT BIOTECHNOLOGY

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

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1. Explant.
2. Scope of Biotechnology.
3. Cell suspension.
4. Synthetic seeds.
5. In vitro genetic engineering.
6. PCR.
7. RFLP.
8. Direct gene transfer.

(DBOT 24)

Assignment 2

M.Sc. (Final) DEGREE EXAMINATION,
DECEMBER 2020.
Second Year
Botany

Paper VIII : PLANT BIOTECHNOLOGY

MAXIMUM MARKS: 30

ANSWER ALL QUESTIONS

1) Describe micro propagation and production of haploids through anther culture.

2) Give an account of meristem culture and embryogenesis.

3) Describe the protocol of somatic embryogenesis and synthetic seeds.

4) How do you isolate protoplast and culture it?

5) Describe genomic and cDNA libraries.

6) Describe the molecular analysis of DNA by blotting techniques.

7) Give an account of gene transfer methods Agrobacterium mediated gene transfer.

8) Explain the role of biotechnology in industry.

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