(DBOT21)

ASSIGNMENT-1

M.Sc. (Second) DEGREE EXAMINATION, DECEMBER - 2019 (Second Year)

BOTANY

Development Biology of Angiosperms & Ethnobotany Answer ALL Questions

Maximum: 30 MARKS

Q1) Incompatibility.
Q2) Fertilisation.
Q3) Root-stem transition.
Q4) Apical bud.
Q5) Primitive tribal groups of AP.
Q6) Conservation of sacred groves.

Q7) Phytochemicals.

(DBOT21)

ASSIGNMENT-2

M.Sc. (Second) DEGREE EXAMINATION, DECEMBER - 2019

(Second Year)

BOTANY

Development Biology of Angiosperms & Ethnobotany

Maximum: 30 MARKS

- Q1) Phytochemicals
- Significance of ethnobotanical research. Q2)
- **Q3**) a) Describe the structure and development of embryo.
 - b) Write an essay on polyembryony and apomixis.
- **Q4**) Describe the anatomy of leaf. a)
 - Give an account of anomalous secondary growth in a monocot stem. b)
- **Q5**) a) What are the contributions of traditional medicine to modern medicine?
 - b) Describe the sacred groves of Guntur and Prakasam districts.
- **Q6)** a) How do you evaluate scientifically the plants used by tribals?
 - b) Give an account of tribal rights.



(DBOT22)

ASSIGNMENT-1

M.Sc. (Second) DEGREE EXAMINATION, DECEMBER - 2019

Second Year BOTANY

Microbiology, Mycology and Plant Diseases

Maximum: 30 MARKS
Answer ALL Questions

- Q1) Ultra structure of bacterial cell.
- **Q2)** Chemoautotrophs.
- Q3) Classification of fungi.
- **Q4)** Myxomycotina.
- **Q5)** Physiological changes in diseased plants.
- **Q6)** Role of enzymes and phytoalexins in pathogenesis.

(DBOT22)

ASSIGNMENT-2

M.Sc. (Second) DEGREE EXAMINATION, DECEMBER - 2019

Second Year BOTANY

Microbiology, Mycology and Plant Diseases

Maximum: 30 MARKS

- **Q1)** Rust of groundnut.
- **Q2)** Little leaf of brinjal.
- **Q3)** a) Describe the role of bacteria in carbon and nitrogen cycles.
- **Q4)** a) Give a general account of Deuteromycotina.
 - b) Write a detailed account of mushroom cultivation.
- **Q5)** a) Describe the entry and establishment of pathogens and their dispersal.
 - b) Describe the factors affecting outbreak of plant diseases, indexing and forecasting.
- **Q6)** a) Describe the symptoms, etiology, epidemiology and control of powdery mildew of cucurbits.
 - b) Describe the symptoms, etiology, epidemiology and control of diseases in rice.



(DBOT23)

ASSIGNMENT-1

M.Sc. (Second) DEGREE EXAMINATION, DEC. - 2019

Second Year BOTANY

Cell Biology and Molecular Biology

Maximum: 30 MARKS
Answer ALL Questions

- Q1) Plasma membrane
- Q2) Endoplasmic reticulum
- **Q3)** Compound microscope
- **Q4)** Signal transduction
- **Q5)** Conjugation and transduction
- **Q6)** Fine structure of gene

(DBOT23)

ASSIGNMENT-2

M.Sc. (Second) DEGREE EXAMINATION, DEC. – 2019

Second Year BOTANY

Cell Biology and Molecular Biology

Maximum: 30 MARKS

- Q1) Genetic code
- Q2) DNA repair
- **Q3)** a) Describe the ultra structure and functions of golgi apparatus.
 - b) Describe the ultra structure and functions of lysosomes.
- **Q4)** a) Describe the principles and applications of TEM.
 - b) Describe the over view of transposable elements.
- **Q5)** a) How do you prove DNA as genetic material?
 - b) Describe the evolution of gene concept.
- **Q6)** a) Describe the replication of DNA.
 - b) Describe the gene regulation in prokaryotes.



(DBOT24)

ASSIGNMENT-1

M.Sc. (Second) DEGREE EXAMINATION, DECEMBER - 2019

Second Year

BOTANY

PLANT BIOTECHNOLOGY

Maximum: 30 MARKS

- Q1) Scope of biotechnology
- Q2) Micropropagation
- Q3) Somatic embryogenesis
- Q4) Cell suspension and culture
- **Q5)** Western blotting
- **Q6)** Amplification of DNA

(DBOT24)

ASSIGNMENT-2

M.Sc. (Second) DEGREE EXAMINATION, DECEMBER - 2019

Second Year

BOTANY

PLANT BIOTECHNOLOGY

Maximum: 30 MARKS

- **Q1)** RFLP
- **Q2)** Agrobacterium mediated gene transfer
- **Q3)** a) Describe the selection of mutants in vitro for biotic and abiotic stress.
 - b) What techniques do you follow for tissue culture?
- **Q4)** a) Describe the protocol for production of synthetic seeds.
 - b) Give an account of protoplast fusion and somatic hybridization.
- **Q5)** a) Describe the production of r DNA molecule.
 - b) Explain the role of gene cloning vectors in biotechnology.
- **Q6)** a) Describe the direct gene transfer methods.
 - b) Explain the role of transgenic plants in agriculture.

