

PGIIS-N 1539 B-14
M.Sc. IIIrd Semester Degree Examination
Botany
(Plant Physiology)
Paper - BOT-HCT:3.1
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to candidates:

1. Answer any five questions
2. Question No 1 is compulsory

I Answer in one or two sentences**(8x2=16)**

- a) Peptide Bond
 - b) B-oxidation
 - c) Physiological role of auxin
 - d) C₄ pathway
 - e) Oxidative phosphorylation
 - f) Biological clock
 - g) cold stress
 - h) Reducing sugar
2. Give an account of synthesis of fatty acids in plants. How is converted to carbohydrates in germinating seeds **(16)**
 3. Explain the distribution bioarray metabolism and mechanism action of ethylene **(16)**
 4. What is phytochrome. Describe the characteristics future of biological rhythms **(16)**
 5. Give an account of carbon-fixation mechanism in c₄ plants. **(16)**

6. Write short notes on any four of the following

(16)

- a) Purification of enzyme
 - b) Hatch slack cycles
 - c) Nitrification and denitrification
 - d) Classification of lipids
 - e) Photorespiration
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PGIIS - N 1540 B - 14
M.Sc. IIIrd Semester Degree Examination
Botany
(Molecular Biology)
Paper - 3.2
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- i) Answer any Five questions
- ii) Question NO. 1 is Compulsory

1. Answer in one Or two sentences **(8×2=16)**
 - a) TATA box
 - b) Consensus sequences
 - c) GT - AG Rule
 - d) 16S rRNA
 - e) P elements
 - f) p53 Protein
 - g) B-Cells
 - h) Attenuation
2. Explain the importance of molecular biology in the development of biological sciences **(16)**
3. Give an account of gene regulation in prokaryotes **(16)**
4. Discuss the contribution of Mc Clintoc Barbara. **(16)**
5. Describe the genetic control of cell cycle. **(16)**
6. Write short notes on any four of the following. **(4×4=16)**
 - a) Composition ribosome
 - b) Transposase enzyme
 - c) Antibody genes
 - d) Oncogenes
 - e) DNA methylation

PGIIS-N 1541 B-14
M.Sc. IIIrd Semester Degree Examination
Botany
(Methods in Plant Science)
Paper - SCT-3.31
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- i) Answer any five questions
- ii) Question No 1 is compulsory

- I. 1. Answer in one or two sentences (8x2=16)**
- a) Culture media
 - b) Anderson sampler
 - c) TLC
 - d) Centrifugal force
 - e) Combination electrode
 - f) flame photometry
 - g) MS
 - h) Column Chromatography
2. Give an account of principle classification of chromatographic methods and their applications (16)
3. Describe the different types of electrophoresis and their applications (16)
4. Describe the principle and working mechanism of compound microscope (16)
5. Principles and working mechanism of spectra photometry (16)

6. Write short notes on any four of the following

(16)

- a) Dilution plate technique
 - b) principles of beer lambert law
 - c) Real time PCR
 - d) NMR
 - e) Applications of PCR technique
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PGIII S N 1542 B-14
M.Sc. IIIrd Semester Degree Examination
Botany
Medicinal Plants
Paper : BOT. OET 3.4
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

Answer any Five questions. Question No. 1 is Compulsory.

1. Answer in one or TWO sentences: (8 × 2 = 16)
 - a) CDRI
 - b) Cancer
 - c) Anti fertility
 - d) Ethno-medicine
 - e) Kapha
 - f) Dhanvatri
 - g) Mushrooms
 - h) Decoction
2. Classify and explain the medicinal properties based on the plant parts. (16)
3. Discuss the contribution of tribals and other communities to ethnobotany. (16)
4. Write briefly the Unani system of medicine. (16)
5. General account on medicinal and nutritional value of mushrooms.
6. Write short notes on any four of the following: (16)
 - a) Role of secondary metabolites
 - b) Diabetes and its management
 - c) Respiratory and intestinal disorders.
 - d) Medicinal plants in homeo pathy
 - e) Medicinal value of wild food plants.

PGIII S N 1542 B-14
M.Sc. IIIrd Semester Degree Examination
Botany
Medicinal Plants
Paper : BOT. OET 3.4
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

Answer any Five questions. Question No. 1 is Compulsory.

1. Answer in one or TWO sentences: (8 × 2 = 16)
 - a) CDRI
 - b) Cancer
 - c) Anti fertility
 - d) Ethno-medicine
 - e) Kapha
 - f) Dhanvatri
 - g) Mushrooms
 - h) Decoction
2. Classify and explain the medicinal properties based on the plant parts. (16)
3. Discuss the contribution of tribals and other communities to ethnobotany. (16)
4. Write briefly the Unani system of medicine. (16)
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6. Write short notes on any four of the following: (16)
 - a) Role of secondary metabolites
 - b) Diabetes and its management
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 - d) Medicinal plants in homeo pathy
 - e) Medicinal value of wild food plants.