

**Dr. B. R. AMBEDKAR OPEN UNIVERSITY
FACULTY OF SCIENCE**

M.Sc. – II YEAR – BOTANY (2018 – 19)

COURSE – 05: CELL BIOLOGY, GENETICS, BIostatISTICS & ECOLOGY

ASSIGNMENT – I

Maximum Marks – 15
Minimum Marks – 06

SECTION – A
(Marks – 10)

I. Answer any one of the following two questions in about 30 lines.

- 1 Write an essay on structure and function of Ecosystem?
- 2 Describe briefly how genetic recombination occurs in bacteria?

SECTION – B
(Marks – 5)

II. Answer any one of the following two questions in about 10 lines.

- 1 Mechanism of cell cycle control?
- 2 Methods of measuring primary productivity?

ASSIGNMENT – II

Maximum Marks – 15
Minimum Marks – 06

SECTION – A
(Marks – 10)

I. Answer any one of the following two questions in about 30 lines.

- 1 What are the different types of pollution? Give an account of noise pollution its causes, effects and control measures?
- 2 What is bioinformatics? Describe its main components and application.

SECTION – B
(Marks – 5)

II. Answer any one of the following two questions in about 10 lines.

- 1 Value of biodiversity
- 2 Lamp brush chromosomes.

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COURSE – 06: MEDICINAL PLANTS AND EMBRYOLOGY OF ANGIOSPERMS

ASSIGNMENT – I

Maximum Marks – 15
Minimum Marks – 06

**SECTION – A
(Marks – 10)**

I. Answer any one of the following two questions in about 30 lines.

1. Write an essay on adulteration of crude drugs. Add a brief account on drug evaluation.
2. What is megasporogenesis? Write about tetrasporic embryo sac development.

**SECTION – B
(Marks – 5)**

II. Answer any one of the following two questions in about 10 lines.

1. Ultra structure of embryosac?
2. Melittopalynology

ASSIGNMENT – II

Maximum Marks – 15
Minimum Marks – 06

**SECTION – A
(Marks – 10)**

I. Answer any one of the following two questions in about 30 lines.

1. Describe the morphological characters and the medicinal uses of *Emblica* and *Curcuma*.
2. What is Ethanobotany. Give the history and development of ethanobotanical Studies.

**SECTION – B
(Marks – 5)**

II. Answer any one of the following two questions in about 10 lines.

1. Phytochemicals.
2. Biological significance of incompatibility.

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M.Sc. – II YEAR – BOTANY (2018 – 19)
COURSE – 07: APPLIED MYCOLOGY AND PLANT PATHOLOGY

ASSIGNMENT – I

Maximum Marks – 15
Minimum Marks – 06

SECTION – A
(Marks – 10)

I. Answer any one of the following two questions in about 30 lines.

1. Discuss the importance of mycorrhiza in agriculture and forestry.
2. Give a detailed account of nutritive and medicinal values of mushrooms.

SECTION – B
(Marks – 5)

II. Answer any one of the following two questions in about 10 lines.

1. Fungi as source of food.
2. Describe symptoms of Bakane disease of rice.

ASSIGNMENT – II

Maximum Marks – 15
Minimum Marks – 06

SECTION – A
(Marks – 10)

I. Answer any one of the following two questions in about 30 lines.

1. Write in brief regarding the cultivation of button mushrooms.
2. Describe briefly the fermentation process of citric acid production.

SECTION – B
(Marks – 5)

II. Answer any one of the following two questions in about 10 lines.

1. Fungi in bioremediation.
2. Importance of biochemical characteristics in the classification of fungi.

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COURSE – 08: PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY

ASSIGNMENT – I

Maximum Marks – 15
Minimum Marks – 06

SECTION – A
(Marks – 10)

I. Answer any one of the following two questions in about 30 lines.

1. What is genome? Give an account of genome organization.
2. Discuss the various modifying enzymes used in molecular cloning?

SECTION – B
(Marks – 5)

II. Answer any one of the following in about 10 lines.

1. Cybrids and their production?
2. Plant metabolomics and its application.

ASSIGNMENT – II

Maximum Marks – 15
Minimum Marks – 06

SECTION – A
(Marks – 10)

I. Answer any one of the following two questions in about 30 lines.

1. Describe the protein synthesis?
2. Describe an account of plant tissue culture technology and its application.

SECTION – B
(Marks – 5)

II. Answer any one of the following in about 10 lines.

1. Applications of molecular markers.
2. Genomic library.