Half Yearly Examination 2020-21

B.Sc. Part I

Microbiology

Paper - I

General Microbiology & Basic Techniques

Note: Attempt all the questions each question carries equal marks. **MM-50**

Q1. What are beneficial microorganisms? Explain their role in daily life.

Or

Write short note on:

(a)Transition period (b) Louis Pasteur

Q2. Describe various major groups of microorganisms.

Or

Write short note on

(a) Golden era of Microbiology (b) Edward Jenner

Q3. What do you mean by Sterilization? Describe Chemical methods of sterilization

Or

Write short note on:

(a)Acid fast staining (b) Waksman serial dilution and plating method

Q4. Give a detail account on various preservation techniques of pure culture

Or

Write short note on

(a) Culture media (b) Gram Staining

Q5. Describe Cell wall of Gram Positive and Gram negative Bacteria

Or

Write short note on

(a) Influenza Virus (b) Economic importance of Bacteria.

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Half Yearly Examination 2020-21

B.Sc. Part II

Microbiology

Paper - I

Molecular Biology and Genetic Engineering

Note: Attempt all the questions each question carries equal marks. **MM-50**

Q1. Give a detail account on history of Molecular Biology

Or

Write short note on:

(a) Types of DNA polymerase enzyme (b) Hershey and Chase experiment

Q2. What is replication? Write a note on mechanism of DNA replication

Or

Write short note on

(a) DNA as a genetic material (b) Scope of molecular biology

Q3. What is central dogma? Describe transcription mechanism in detail.

Or

Write short note on:

(a) RNA polymerase (b) Genetic code

Q4. Explain various steps of translation with suitable diagram

Or

Write short note on

(a)Transcription inhibitors (b) Sigma factor

Q5. What is mutation? Describe types of gene mutation.

Or

Write short note on

(a) Mismatch repair (b) Harmful effect of mutation

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Half Yearly Examination 2020-21

B.Sc. Part - III

Microbiology

Paper - I

Molecular biology and Genetic engineering

Note: Attempt all the questions each question carries equal marks. **MM-50**

Q1. Discuss early history of genetic engineering in detail.

Or

Write short note on:

(a) Model system (b) Concept of molecular biology

Q2. Give a detail account on history of molecular biology

Or

Write short note on

(a) Ethical issue (b) Concept of genetic engineering

Q3. What is mutation? write a note on spontaneous and induced mutation

Or

Write short note on:

(a) Ame's test (b) Conditional lethal mutation

Q4. Explain various types of gene mutation

Or

Write short note on

(a) Revertion vs suppression (b) Auxotrophs

Q5. Describe early observation on the mechanism of heredity.

Or

Write short note on

(a) Enzymes involved in replication (b) Genetic code

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