

MODEL QUESTION PAPER

BSC II YEAR

BIOTECHNOLOGY

SECOND PAPER

BIOINSTRUMENTATION, BIOSTATISTICS AND BIOINFORMATICS

TIME: 3 HRS

MAXIMUM MARKS: 40

MINIMUM MARKS: 15

Note: The question paper consists of two sections: A and B. attempt all the questions according to the given instructions.

Section A

Short Answer Type Questions

Note: Attempt all questions. Each question carries three marks (5 X 2 = 10)

Q1. Write down the definition of phase contrast microscopy.

Or

Principle of centrifugation.

Q2. Southern blotting.

Or

Western blotting.

Q3. Describe autoradiography

Or

Define colorimetry

Q4. Write short note on presentation of data.

Or

Define probability.

Q5. Organization of hardware.

Or

Describe EMBL and GenBank.

Section B

Long Answer Type Questions

Note: Attempt all questions. Each question carries five marks (5 X 6 = 30)

Q6. What do you understand by electron microscopy? Differentiate between SEM and TEM.

Or

Explain centrifugation with their types.

Q7. Explain electrophoresis with its applications.

Or

Define concept of chromatography with its principle and applications.

Q8. Define spectrophotometry.

Or

Write detail note on radio labeling and non-radiolabelling.

Q9. Explain mean and median with suitable example.

Or

Write detail note on collection, classification and data summerization.

Q10. Explain system and application software.

Or

Define protein databases? PROSITE, PRINT, BLOCK.