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(Printed Pages 3)

(20425)

Roll No. 8006

B.Sc.(Bio-Tech.) - III yr.

Kidushi

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B.Sc. (Biotechnology)

Examination, April-2025

GENOMICS AND PROTEOMICS

(BN-307)

(B.Sc. Bio-tech.)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt any **five** questions. **All** questions carries equal marks.

1. Discuss the acquisition of new genes and its impact on genomes and human evolution. 15
2. Explain the concept of DNA-based phylogenetic trees and their use in evolutionary biology. 15

P.T.O.

3. Write short notes on: 7.5+7.5
(a) Transcript and functional maps
(b) Physical maps.
4. Define genetic maps and describe their importance in genome mapping. 15
5. What is whole genome shot gun sequencing? Explain its methodology and advantages. 15
6. Write short notes on: 7.5+7.5
(a) 2D PAGE
(b) LC-MS
7. Discuss the management of genomic data in silico and its importance in bio informatics. 15
8. Write short notes on: 7.5+7.5
(a) MALDI
(b) SALDI

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9. Explain the concept and approaches of proteomics studies and their significance. 15
10. Define QSAR and discuss its application in drug discovery and development. 15

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