

(i) Printed Pages : 2

Roll No.

(ii) Questions : 9

Sub. Code :

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Exam. Code :

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B.Sc. (Hons.) Biotechnology 6th Semester
(2053)

GENOMICS AND PROTEOMICS

Paper : BIOT-604-T

Time Allowed : Three Hours]

[Maximum Marks : 67

Note :— Attempt **five** questions in all, including question no. 1 which is compulsory and taking **one** from each Unit. All questions carry marks as indicated.

1. (a) Define DNA.
- (b) Discuss SNP.
- (c) What is ENSEMBL ?
- (d) Write two advantages of 2 D PAGES.
- (e) Write two Model organisms for human.
- (f) What is "NCBI Browser" ?
- (g) What is genetic map ?
- (h) Define Genome.
- (i) Discuss non covalent bonds.
- (j) What are covalent linkages?

1.5×10=15

UNIT—I

2. (a) Discuss the Automated Genome sequencing and its importance.
(b) What is a Shotgun method for sequencing ? 6,7
3. (a) What is a Maxam & Gilbert sequencing method ?
(b) Write a note on limitations of human genome. 6,7

UNIT—II

4. (a) Write a note on manage and distribution genome.
(b) Discuss UCSC database and its applications. 6,7
5. (a) Write a note on web server for genome analysis.
(b) Write a note on ENSEMBL and its significance. 6,7

UNIT—III

- 6.. (a) Write a note on chemical interaction define in protein structure.
(b) Write a note on short range interaction. 6,7
7. (a) Discuss about Gel filtration and its applications.
(b) Discuss SDS — PAGE and its uses. 6,7

UNIT—IV

8. (a) Write a note on Proteome and its significance.
(b) Write a note on 2D–PAGE and its applications. 6,7
9. (a) Discuss about the mass spectroscopy based methods for protein identifications.
(b) Discuss De novo sequencing using mass spectrometric data. 6,7