A

(21119)

Printed Pages : 3

Roll No. .....

M.Sc. (Biotech.)-III Sem.

NP-3341

M.Sc. (Biotechnology) Examination,

November-2019

GENOMICS AND PROTEOMICS

[(H-304) M.Sc. (Biotech.)]

Time : Three Hours] *[Maximum Marks : 50*

Note : Attempt questions from **all** sections as per instructions.

Section–A

Very Short Answer Questions

Note : Answer **all** the **five** questions. Each question carries 2 marks. Very short answer is required.

5×2=10

1. Write a note on DNA chips. 2

2. Comment in brief on genome evolution. 2

3. What are personalized medicines. 2

4. Comment upon TILLING 2

5. Write in brief on SALDI. 2

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Section–B

Short Answer Questions

Note : Attempt any *two* questions from this section. Each question carries 5 marks. Short answer is required.

6. Write a detail note on insertion mutagenesis. 5

7. Comment upon Human Genome Project in detail. 5

8. How do physical maps differ from genetic maps and why? 5

Section–C

Detailed Answer Questions

Note : Answer any three questions from this section. Each question carries 10 marks. Answer is required in detail.

9. Give a critical account on genome sequencing. Discuss whole genome shotgun approach of genome sequencing. 10

10. What is comparative genomics and how does it resolve co-linearity and synteny between two related genomes ? Discuss it using the examples of grass genomes including cereal and millet genomes. 10

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11. Write detailed note on the following : 5 each

(a) Mass Spectrophotometery

(b) Approaches of proteomics study

12. Explain with the help of suitable examples, the applications of proteomics. 10

13. Write in detail on : 5 each

(a). 2D PAGE for proteomics

(b) Yeast two hybrid system