

V (Printed Pages 3)  
(21225) Roll No.  
M.Sc. (Biotech.)-III Sem.

### NP-3341

#### M.Sc. (Biotechnology) Examination, Dec.-2025

#### 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 Type Questions)

**Note :** Answer all the **five** questions. Each  
question carries 02 marks. Very short  
answer is required.  $5 \times 2 = 10$

1. What do you mean by phylogenetic tree?  
Write a note. 2

**P.T.O.**

2. Differentiate between EST and transcript  
maps. 2
3. What is DNA chip? Explain. 2
4. Write a short note on BN-PAGE. 2
5. What do you mean by yeast two hybrid  
system. 2

#### Section-B

##### (Short Answer Type Questions)

**Note :** Attempt any **two** questions from this  
section. Each question carries 05  
marks.  $2 \times 5 = 10$

6. What is whole genome shotgun  
sequencing? Explain. 5
7. Differentiate between EST contigs and  
unigene sets. 5
8. What is pharmacogenomics? Write the  
use of SNP in pharmacogenomics. 5

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## Section-C

### (Detailed Answer Type Questions)

**Note :** Answer any **three** questions from this section. Each question carries 10 marks.  $3 \times 10 = 30$

9. Write detailed on the following: 10  
(i) TILLING  
(ii) T-DNA
10. Write detailed note on MALDI and SALDI. 10
11. What is drug targeting? Explain methods and use of drug targeting. 10
12. What do you mean by gene expression? Explain complete procedure of gene expression analysis. 10
13. Describe the protein separation technique and types in detail. 10

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