

No. of Printed Pages : 03

Roll No.

BB-222

M. Tech. EXAMINATION, May 2017

(Second Semester)

(B. Scheme) (Main & Re-appear)

(BT)

BT-504-B

GENOMICS AND PROTEOMICS-II

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

(3-10/11)M-BB-222

P.T.O.

Unit I

1. Explain in detail about the organization of genes in Eukaryotes and Prokaryotes. **15**
2. Differentiate the following : **7½×2=15**
 - (a) Fish vs Gish technique
 - (b) Genetic vs physical gene mapping.

Unit II

3. What is Gene Annotation ? Describe the annotation technique and their relevance in molecular genetic analysis of disease causing genes in human. **15**
4. Write short notes on the following : **5×3=15**
 - (a) MRNA profiling
 - (b) Gene tagging
 - (c) Gene-expression analysis.

Unit III

5. Discuss the Isolation and proling of protein from biological sample and their characterization by 2D and 3D-PAGE technique. **15**

6. Describe specifically the following : **5×3=15**
 - (a) NMR-Sample analysis
 - (b) Affanity chromatography
 - (c) Phage-display.

Unit IV

7. Discuss the implication of comparative genomics by taking example of Hepatitis and meangitis in human. **15**
8. Drug discovery in a long process. Describe, how it is being helped through genomics tool. Give examples. **15I**