PG Even Semester Examination, September, 2023

BIOTECHNOLOGY

(2nd Semester)

Course No: BTYCC-202
(Molecular Biology)

FM: 70
Pass Marks : 28
Time: 3 Hours

The figures in the right margin indicate full marks for the question

1. What are gene families? Discuss the different types of gene families. Describe the arrangement of gene families. 2+8+4=14

Or

2. Explain salient features of organization of human genome. Explain cot curve for a prokaryotic genome. 7+7=14

3. Describe the mechanism of replication in prokaryotes. 14

Or

4. What is DNA polymerase? Descibe the roles of different enzymes in DNA replication. 2+12=14

5. Discuss the mechanism of transcription in prokaryotes. 14

Or

6. Write a note on post transcriptional modification and transport of RNA. 14

7. Write the process of protein synthesis in prokaryotes. 14

Or

8. Write short notes on : 3½x2=14

   (i) Ribonucleoprotein

   (b) Genetic Code

   (c) Autocalalytic splicing

   (d) Non coding RNA

9. Write the process of post-translational modification of protein. 14

Or

10. Write a note on mechanism of chromatin and its importance in relation to gene expression. 14

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