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GIET UNIVERSITY, GUNUPUR – 765022

M. Sc. (Second Semester) Examinations, September – 2021

20BTPC204 – Genomics and Proteomics

(Biotechnology)

Time: 2 hrs

Maximum: 50 Marks

(The figures in the right hand margin indicate marks.)

PART – A

- Q.1. Answer **ALL** questions (2 x 10 = 20 Marks)
- a. What do you mean by Genophore?
 - b. Write importance of mt DNA?
 - c. What is incompatibility?
 - d. Define single molecule RNA FISH?
 - e. What is SWISS PORT?
 - f. What do you mean by plant phenotyping?
 - g. Write two applications of yeast two hybrid system?
 - h. What is gene ethics?
 - i. What are the components of nucleoside?
 - j. Write four characteristics of prokaryotic cell?

PART – B (6 x 5 = 30 Marks)

Answer ANY FIVE the questions

Marks

2. Why supercoiling of DNA is important? (6)
3. Explain with a neat diagram the organization of *Arabidopsis thaliana* chloroplast genome? (6)
4. Explain the steps used in 16S RNA gene in sequencing? (6)
5. How genomes are used to understand evolution of eukaryotes? (6)
6. How does the yeast two hybrid system works? (6)
7. Give an account of principle of electrophoresis? (6)
8. a. How gene location is determined in genome sequence? (3+3)
- b. Write on Protein-protein?

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