

--	--	--	--	--	--	--	--	--	--



GIET UNIVERSITY, GUNUPUR – 765022
M. Tech (Second Semester Examinations) – October' 2021
MPEBT2031 – 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)

- What do you mean by Pedigree analysis?
- What is the significance of chloroplast DNA?
- Mention four tools for genome analysis.
- How DNA sequencing has been used to identify microbes?
- What is 16S rRNA and how is it useful in detecting bacteria?
- What are expressed sequence tags and sequence annotation?
- What are proteomic techniques?
- State the principle of 2D gel electrophoresis?
- Mention only the stages of drug development?
- What is microarray data analysis?

PART – B

(6 x 5 = 30 Marks)

Answer **ANY FIVE** questions

Marks

- Explain Sanger method of DNA sequencing. How it can be translated to a large scale project? (6)
- What is DNA fingerprinting? How it is useful in forensic science? (6)
- Explain genome sequencing in plant with reference to an example? (6)
- Discuss about two molecular marker and their applications. (6)
- How does N-terminal sequencing work? Explain. (6)
- What are different methods for studying Protein-Protein interaction? Explain. (6)
- Explain the approach forward genetic citing with an example? (6)

--- End of Paper ---