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GIET UNIVERSITY, GUNUPUR - 765022
M. Sc. (First Semester) Regular Examinations, February - 2024
22BTPC104 - Microbiology
(Biotechnology)

Time: 3 hrs

Maximum: 70 Marks

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

PART - A**(2 x 10 = 20 Marks)**Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. What are the applications of microbiology?	CO1	K1
b. Differentiate between mycoplasma and mycobacteria.	CO1	K4
c. What are methanogens?	CO2	K1
d. What are different types of media used in microbial culture?	CO3	K2
e. What is a bacteriophage?	CO2	K1
f. Differentiate between virus and virioids.	CO2	K4
g. What are MFCs?	CO4	K2
h. Define ruminant symbiosis.	CO4	K2
i. What is the importance of cilia and flagella in bacteria?	CO2	K2
j. What is pseudomonas used for?	CO2	K1

PART - B**(10 x 5=50 Marks)**Answer **ANY FIVE** questions

	Marks	CO #	Blooms Level
2. a. Explain the theory of spontaneous generation.	5	CO1	K2
b. Mention the contribution of some scientist in the field of microbiology.	5	CO1	K2
3.a. How can you isolate and culture microorganisms using streak plate method?	5	CO3	K1
b. Mention the role of fungi in various fields.	5	CO2	K2
4. Classify bacteria according to its different criterias.	10	CO1	K2
5.a. Write short note on Lactic and propionic acid bacteria.	5	CO2	K2
b. What are halophiles? Classify them and mention their uses.	5	CO2	K1
6. a. How can you control the unwanted growth of microorganisms?	5	CO3	K3
b. What are antibiotics? Mention their types and application.	5	CO4	K2
7. Describe about the different methods of virus replication.	10	CO2	K2
8. a. What are the roles played by microorganisms with respect to environment?	5	CO4	K2
b. What is bacterial quorum sensing? Mention its importance.	5	CO4	K3