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GIET UNIVERSITY, GUNUPUR – 765022

B. Tech (Third Semester - Regular) Examinations, December – 2022

21BBTPC23003 – Microbiology

(Biotechnology)

Time: 3 hrs

Maximum: 70 Marks

Answer ALL questions

(The figures in the right hand margin indicate marks)

PART – A

(2 x 5 = 10 Marks)

	CO #	Blooms Level
Q.1. Answer <i>ALL</i> questions		
a. State the role of diazotrophic microbes?	CO2	3
b. Define mutagens? Give examples of mutagen?	CO2	3
c. What do you mean by competency factor?	CO2	2
d. Differentiate between broad spectrum and narrow spectrum antibiotics?	CO4	3
e. What do you mean by food poisoning?	CO3	2

PART – B

(15 x 4 = 60 Marks)

Answer ALL the questions

	Marks	CO #	Blooms Level
2. a. Explain the methods used for the establishment of pure culture?	8	CO1	3
b. Explain the life cycle of hepatitis ?	7	CO4	3
(OR)			
c. Discuss about bacteriological analysis of water and its importance?	8	CO4	3
d. Describe the sterilization process and it's types?	7	CO1	3
3.a. Discuss in detail about gram staining technique?	8	CO1	3
b. Explain about the structure of virus?	7	CO1	3
(OR)			
c. Explain the structure and properties of transposon?	8	CO2	3
d. Describe about microbiology of milk and dairy products?	7	CO3	3
4.a. Discuss in detail about ames test for mutagenesis?	8	CO2	3
b. Write notes on medical importance of gram +ve and gram –ve bacilli?	7	CO3	2
(OR)			
c. Discuss about the role of antibiotics and it's mode of action?	8	CO4	3
d. Write about DNA and RNA viruses and their diseases?	7	CO3	2
5.a. Discuss about microbiology of extreme environments?	8	CO4	3
b. Explain about microbial synchronous growth and its kinetics?	7	CO2	3
(OR)			
c. Explain about plasmids and its types?	8	CO2	3
d. Enumerate about the process of nitrogen fixation and its types?	7	CO1	3

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