

GIET UNIVERSITY, GUNUPUR – 765022

AR 22

M. Sc. (First Semester) Examinations, March - 2023

22LSPC103 - Microbiology and Pathology

(Life Science)

Time: 3 hrs Maximum: 70 Marks

	(The figures in the right hand margin indicate marks.)	
PART – A		$(2 \times 10 = 20 \text{ Marks})$

Q.1. Answer all questions		CO#	Blooms Level
a.	Define diauxy growth?	CO2	K1
b.	Emphasize the role of oncogenes?	CO4	2
c.	What do you mean by chemoheterotrophy?	CO2	1
d.	Difference between benign & malignant tumour?	CO4	1
e.	Name two reagents used in acid fast staining?	CO1	2
f.	Difference between virulent & temperate phage?	CO3	2
g.	What is the role of F-plasmid?	CO3	1
h.	Name two environmental factor exposures leading to disease?	CO4	2
i.	What are sterilants? Give examples?	CO1	1
j.	What do you mean by broad spectrum antibiotic? Give example?	CO2	1

PART - B (10 x 5 = 50 Marks)

Answer ANY FIVE questions		Marks	CO#	Blooms Level
2. a.	Write notes on viroids and prions?	5	CO1	2
b.	Discuss about the use of microbes in agriculture?	5	CO2	3
3.a.	Discuss about lytic and lysogenic life cycle of virus?	5	CO3	3
b.	Discuss about the general principals of microbial pathogenesis?	5	CO4	3
4. a.	Explain about metagenomics with application?	5	CO3	3
b.	Discuss about antibiotics with its mode of action?	5	CO2	3
5.a.	Discuss about brief outline survey of microbes such as yeast AND cyanobacteria?	5	CO2	3
b.	Discuss about bacterial transformation process?	5	CO3	3
6. a.	Discuss about nutritional deficiencies and obesity related disorder?	5	CO4	3
b.	Discuss about sterilization and its types?	5	CO1	3
7.a.	Write notes on virus as a tool for genetic engineering?	5	CO3	2
b.	Write notes on bacterial nutrition?	5	CO2	2
8. a.	Explain about bacterial growth with factors affecting bacterial growth?	5	CO2	3
b.	Discuss about bacterial cell structure and its morphological feature?	5	CO1	3