This question paper contains 2 printed pages]

## NA-155-2023

## FACULTY OF SCIENCE AND TECHNOLOGY

## B.Sc. (Second Year) (Third Semester) EXAMINATION NOVEMBER/DECEMBER, 2023

(New)

## **MICROBIOLOGY**

Paper-VII

(Immunology)

(Frie	day, 22	2-12-2023)	Cime: 2.00 p.m. to 4.00 p.	m.				
Time	2—2 H	lours	Maximum Marks—	$\frac{-}{40}$				
N.B.	:6	(i) Attempt all questions.						
		(ii) Illustrate your answer with sunecessary.	itable diagrams wherev	er				
1,50	Define pathogenicity. Explain in detail factors predisposing to microbial							
	patho	ogenicity.		15				
		or st						
	(a)	What are Immunoglobulins ? Explain	in detail basic structure	of				
	100 m	Immunoglobulin as per porter et al.		8				
	( <i>b</i> )	Write on theories of Antibody production	n.	7				
2.	Descr	ribe in detail direct and indirect compleme	ent fixation test.	15				
		Or S						
	(a)	Explain with mechanism systemic Anap	hylaxis.	8				
	(b)	Explain Type-II hypersensitivity reaction	n with example.	7				
			P.T.	O.				

$\operatorname{WT}$	(A)	2)		NA—155-	-2023
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3. Write short notes on (any two):

 $5 \times 2 = 10$ 

- (a) Normal flora of oral cavity.
- (b) Antigens of Salmonella typhi
- (c) Immunofluorescence test
- (d) Arthus reaction.

NA-155-2023