(6 Pages) Reg. No.:	Proteins targeted for proteolytis often have a small protein known as ———————————————————————————————————	
Code No.: 5396 Sub. Code: PZOM 41	them. (a) Ubiquitin (b) Proteasomes	
M.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2022	(c) TAP protein (d) ABC proteins	
Fourth Semester	4. From where we got active immunity	
Zoology — Core	(a) anti-bodies	
IMMUNOLOGY	(b) live germ in injection	
(For those who joined in July 2017 onwards)	(c) weak end germs in injection	
Time: Three hours Maximum: 75 marks	(d) blood transfusion	
PART A — $(10 \times 1 = 10 \text{ marks})$	5. When body cannot distinguish between self and	
Answer ALL questions.	foreign matter. It is	
Choose the correct answer:	(a) acquired immunity	
1. Granulocytes belongs to	(b) passive immunity	
(a) Myeloid cell line (b) Lymphoid cell line	(c) auto immunity	
(c) T-lymphocytes (d) Phagocytic cells	(d) immuno deficiency	
2 is the process of promotion of phagocytosis of antifers by the phagocytic cells like	6. T cell is called ————	
macrophages and neutrophils.	(a) Time cells (b) T lymphocyte	
(a) Opsonins (b) Opsonization	(c) Transmit cells (d) T cytokines	
(c) ADGG (d) Idiotypes	Page 2 Code No.: 5396	

7.	Imm	unoglobulins are —		— protein.	
	(a)	Polysaccharide		Lipid	
	(c)	Aminoacids	(d)	Glycoproteins	
8.	Tuberculin or mantoux reaction is a type ———				
	(a)	Cytokine	(b)	Hypersensitivity	
	(c)	IFN	(d)	MCF	
9.	The vaccine is injected into the				
	(a)	water	(b)	plasma	
	(c)	protein	(d)	host	
10.	Type II cross — reaction is (a) Immune reaction between a bacterium and mao (b) Immune reaction that takes place between antibodies raised again of antigen one species to another				
	(c)	Both (a) and (c)			

None of the above

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PART B - (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Give an account on haptens.

Or

- (b) Write the properties B-lymphocytes.
- 12. (a) Explain the antigenic determinate on immunoglobulin.

Or

- (b) What are cytokines? Mention the classes of cytokines.
- 13. (a) Explain third line of defense mechanism.

Or

- (b) Describe immunoglobulin structure and function.
- 14. (a) Write short notes on bone marrow micro environment.

Or

(b) Give an account on cytosolic pathway.

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[P.T.O]

15. (a) Explain the immunology of tumors.

Or

(b) Explain toxoid vaccines.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain immuno suppressive theraphy.

Or

- (b) Describe immune response to tumor antigen.
- 17. (a) Write scope of immunology.

Or

- (b) Explain lymphoid lineage.
- 18. (a) Describe in deal the process of lymphocyte activation.

Or

(b) Write a short note on complement fixation test.

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19. (a) Give a detailed account on the mechanism of phagocytosis.

Or

- (b) Discuss the mechanism involved in graft rejection.
- 20. (a) Write a brief account on the different stages of antigen antibody reaction.

Or

(b) Explain effectors responses of cell mediated and humoral immunity.

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