(6 Pages) Reg. No.:

Code No.: 10220 E Sub. Code: GMZO 62

 $\begin{array}{c} {\rm B.Sc.~(CBCS)~DEGREE~EXAMINATION,} \\ {\rm APRIL~2020.} \end{array}$

Sixth Semester

Zoology — Main

IMMUNOLOGY AND MICROBIOLOGY

(For those who joined in July 2012 - 2015)

Time: Three hours Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL the questions.

Choose the correct answer:

- 1. The secondary lymphoid organ in man is
 - (a) Thymus
 - (b) Bone marrow
 - (c) Spleen
 - (d) Bursa

2.	The immunity to certain infections from bithe natural mechanism is known as						
	(a)	Acquired immunity					
	(b) Active immunity						
	(c)	Passive immunity					
	(d)	Innate immunity					
3.	The only immunoglobulin that crosses to placenta and offers a passive protection to the new born is						
	(a)	IgA	(b)	IgE			
	(c)	IgG	(d)	IgD			
4.	The part of the antigen which combines with the antibody is called						
	(a)	Paratope	(b)	Epitope			
	(c)	Affinity	(d)	Avidity			
5.	Lymphoid lineage produces B Lymphocytes a Lymphocytes and the third population cells ca						
	(a)	Macrophages					
	(b)	Mast cells					
	(c)	Null cells					
	(d)	Megakaryocytic					
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	18						
	(a)	IgG	(b)	IgA			
	(c)	IgM	(d)	IgE			
7.	Viruses have						
	(a)	Both DNA and RNA	A				
	(b)	DNA or RNA					
	(c)	No DNA and RNA					
	(d)	Only RNA					
8.	In bacterial growth curve where the number of births is equal to number of death is						
	(a)	Lag phase	(b)	Log phase			
	(c)	Stationary phase	(d)	Death phase			
9.	Bactericidal antibiotics are which						
	(a)	Controls bacterial growth					
	(b)	Kills bacteria					
	(c)	Regulates Bacteria					
	(d)	Encourages bacteri	a				
10.	The	The disease of hydrophobia means					
	(a)	Water loving	(b)	Water heating			
	(c)	Water hating	(d)	Water cooling			
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The immunoglobulin involved in allergic reaction

6.

PART B — $(5 \times 5 = 25 \text{ marks})$

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

Each answer should not exceed 250 words.

11. (a) Write briefly about innate immunity.

Or

- (b) Give an account on Tonsils.
- 12. (a) Discuss the history of immunology.

Or

- (b) Write the structure and biological properties of immunoglobulin G.
- 13. (a) Write a short account on stem cells.

Or

- (b) Give an account on T cell functions.
- 14. (a) Write about the different types of media for bacterial culture.

Or

(b) Describe the structure of HIV.

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[P.T.O]

15. (a) Write short notes of food spoilage.

Or

(b) Briefly write Gonorrhea.

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) Write an essay on primary lypuplorid organs.

Or

- (b) Write an elaborate essay on Acquired immunity.
- 17. (a) Explain the interaction of antigen and antibody.

Or

- (b) Write an essay on thumoral Immue response.
- 18. (a) Explain cell mediated immune response.

Or

(b) Write an essay on history and scope of microbiology.

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19. (a) Describe batch and continuous culture.

Or

- (b) Write about the production of Antibiotic Penicillin.
- 20. (a) Describe the role of soil microbes in nitrogen fixation.

Or

(b) Write an essay on viral diseases of human.

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