6 SEM TDC DSE ZOO (CBCS) 3 (H)

2025

(May)

ZOOLOGY

(Discipline Specific Elective) (For Honours)

Paper: DSE-3

(Immunology)

Full Marks: 53
Pass Marks: 21

Time: 3 hours

The figures in the margin indicate full marks for the questions

1.	Fill in	the	blanks	with	appropriate	word(s):
						1×5=5

- (a) Mast cells release the potent inflammatory chemical called ____.
- (b) Thymus secretes ____ lymphocytes.
- (c) ____ is a type of blood cell that serves primarily as phagocyte.

- The end product of the complement (d) system is ____. The first antibody released in primary (e) response is _____. 2. Distinguish between (any two): $2 \times 2 = 4$ Primary and Secondary immune (a) response (b) Class I and Class II MHC molecules (c) B-cell epitopes and T-cell epitopes Antigenicity and Immunogenicity (d) 3. Write short notes on (any three): 4×3=12
 - (b) Haptens
 - (c) RIA
 - (d) Hybridoma technology
 - (e) Various types of vaccine

(a) Adjuvants and their effects

4. Define immunology. Describe the cells and organs involved in immune system. 1+7=8

Or

Discuss in brief about the early theories of immunology.

5. Write an explanatory note on active and passive immunity with examples. 4+4=8

Or

Define immune dysfunctions. Discuss AIDS as an auto-immune disorder. 1+7=8

6. What is immunoglobulin? Describe briefly the structure of different types of immunoglobulin with suitable diagrams.

1+7=8

Or

Write an explanatory note on various types of antigen-antibody interaction.

8

7. Discuss the endogenous and exogenous pathways of antigen processing and presentation.

Or

What is complement system? What are its components? Describe briefly about the classical pathway of complement activation.

1+2+5=8

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