

Total No. of Printed Pages—3

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

2 0 2 3

(May/June)

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 : 1×5=5

(a) The ability of an organism to resist pathogenic infections is called _____.

(b) _____ cytokines are released in response to virus infections.

(c) _____ is involved in primary immune reaction.

(2)

(d) The specificity of an antibody is due to _____.

(e) B-cells are activated by _____.

2. Write short notes on (any three) : $4 \times 3 = 12$

(a) Organs of the immune system

(b) MHC molecules

(c) AIDS

(d) Hybridoma technology

3. Write on briefly the following (any three) : $4 \times 3 = 12$

(a) Components and pathways of complement activation

(b) Factors that influence immunogenicity

(c) Vaccines and their types

(d) Adaptive immunity

4. What are immunoassays? Describe ELISA with suitable illustrations. $2 + 10 = 12$

Or

What are immunoglobulins and their types?

Discuss briefly the process of antigen-antibody interactions.

$2 + 4 + 6 = 12$

(3)

5. Explain the process of cell-mediated and humoral immunity. Write about auto-immunity with suitable example. $6 + 3 + 3 = 12$

Or

What are cytokines? List the different types of cytokines and mention their functions.

$2 + 10 = 12$
