

April 2025
B.A./B.Sc.
Sixth Semester
DISCIPLINE SPECIFIC ELECTIVE – 4
ZOOLOGY
Course Code: ZOD 6.21
(Immunology)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Describe in detail the organs involved in the immune system. 14
2. Write a note each on the following: 7×2=14
 - (a) Immunogen
 - (b) Adjuvants

UNIT-II

3. Give the differences between humoral and cell mediated immunity.
Explain in detail the mechanism of cell-mediated immunity. 4+10=14
4. Write a note each on the following. 7×2=14
 - (a) Passive-artificial and natural immunity
 - (b) Inflammation

UNIT-III

5. Define immunoglobulin. Briefly discuss the general structure of immunoglobulin with a neat diagram. 2+10+2=14
6. Write a note each on the following: 7×2=14
 - (a) RIA
 - (b) Monoclonal antibodies in therapeutics

UNIT-IV

7. Elaborate the steps involved in the exogenous pathway of antigen processing and presentation with a neat diagram. $12+2=14$
8. Describe in detail the various functions of cytokine in the immune system. Add a note on therapeutic uses of cytokine. $8+6=14$

UNIT-V

9. What are the components of complement system? Elaborate on the alternative pathway of complement activation with neat diagrammatic representation. $4+10=14$
10. Write a note each on the following: $7\times 2=14$
- (a) Conjugate and DNA vaccine
 - (b) Immediate hypersensitivity
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