

[Total No. of (i) Printed Pages 3 (ii) Questions 9]

**Sub Code :** 0553 (1048) **Exam Code :** 0006

**Exam :** B.A./B.Sc. (General), 6th Semester

**Subject :** Zoology

**Paper :** Paper-II : Applied Zoology-I opt (i) Medical Zoology and Medical Laboratory Technology-II (ZOO-602A)

**Time :** 3 Hours **Maximum Marks :** 36

**Note:** Question No. 1 is compulsory. Attempt **one** question each from **Units – I, II, III and IV** Draw well labelled diagrams wherever necessary.

1. Briefly explain the following : 8×1=8
- (a) Secondary lymphoid organs
  - (b) Polymorphonuclear leucocytes
  - (c) Langerhans cells
  - (d) Idiotypes
  - (e) Resolving Power
  - (f) Venipuncture
  - (g) AFB Stain
  - (h) Nutrient Broth

P.T.O.

0553 (1048)

### UNIT - I

2. (a) Give an account of Physical and Chemical Barriers to infection.  $3\frac{1}{2}$   
(b) Describe the antibody Mediated Immune System.  $3\frac{1}{2}$
3. (a) Discuss the Structure of antigen Molecule. Give its types and functions.  $3\frac{1}{2}$   
(b) How the immunogenicity of an antigen Molecule can be increased. Suggest Suitable Methods.  $3\frac{1}{2}$

### UNIT - II

4. Enumerate the Various Serodiagnostic assays, along with their Merits and limitations. 7
5. Write short notes on :  
(a) Classes of Antibody Molecule  $3\frac{1}{2}$   
(b) Third generation vaccines  $3\frac{1}{2}$

### UNIT - III

6. (a) What are the essential components of an electron Microscope ?  $3\frac{1}{2}$   
(b) Describe the technique used for separation of Mitochondria.  $3\frac{1}{2}$



7. What are anticoagulants ? Briefly explain various anticoagulants giving advantages as well as disadvantages. 7

**UNIT - IV**

8. (a) Give principle and working of an autoclave. 3½  
(b) What are culture Media ? Describe different Kinds of culture media. 3½
9. Describe procedure for the estimation of Blood glucose and Serum Proteins. 7