

2022
ZOOLOGY
[Honours]
(B.Sc. Fourth Semester End Examination-2022)
PAPER-C10T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks
Candidates are required to give their answers in their own words as
far as practicable
Illustrate the answers wherever necessary

Group-A

- 1) Answer any five questions from the following: 5x2= 10
- Compare between Immunogen and haptan.
 - What are the limitations of RIA?
 - Write down the significance of F_c and Fab region of antibody.
 - What are the functions of T_H cells?
 - What is toxoid?
 - What is opsonization?
 - State the name of primary vector of Dengue Virus and which organ is badly affected in tuberculosis?
 - Difference between affinity and avidity.

(2)

Group-B

2. Answer any four questions from the following: 4x5 = 20

- a. Describe the morphological features of microfilaria of *Wuchereria bancrofti*. With labelled diagram. 5
- b. What is adjuvant? Give example. Mention its mode of action. 2+3
- c. What is ADCC? Compare between Innate and Adaptive immunity. 2+3
- d. Difference between B-cell and T-cell epitope. 5
- e. Briefly describe Classical Pathway of Complement activation. 5
- f. Write down the functions:-
- i) Interferon - γ
 - ii) TNF
 - iii) IL-1
 - iv) IL-6
 - v) IL-13 5

Group -C

3. Answer any one questions of the following: 1x10 = 10

- a. i) Mention location ligand and origin of ligand of – TLR 3, TLR 9, NOD 2, and Dectin 1. 4
- ii) Briefly describe and draw of class-I and Class-II MHC proteins. 4

(3)

- iii) compared between attenuated and inactivated vaccine. 2
- b. What is Monoclonal Antibody? Briefly describe the hybridoma technology. Mention the application of Monoclonal Antibody. 2+6+2
-