

B.Sc. Sem-IV (Old)
B.Sc. 2472 - Biotechnology Paper-II (Immunology and Biostatistics)

P. Pages : 2

Time : Three Hours



GUG/S/19/1303

Max. Marks : 50

1. Give the detail account on primary lymphoid organs. 10

OR

Discuss about discovery, principle and significance of vaccination. 10

2. Describe Hybridoma technology with its application in immunodiagnosis. 10

OR

Explain measures of central tendency by mean, mode and median. 10

3. a) Write a note on spleen. 2½

b) Discuss in brief about complement system. 2½

c) Discuss the mechanism of precipitation test. 2½

d) Describe about mean deviation. 2½

OR

p) Write a note on IgA. 2½

q) Discuss about humoral immunity. 2½

r) Discuss the mechanism of complement fixation test. 2½

s) Give the information about sampling errors. 2½

4. a) Give the classification of Immunity. 2½

b) Discuss about delayed type of hypersensitivity. 2½

c) Explain the principle of ELISA test. 2½

d) Write a note on chi-square test. 2½

OR

p) Give brief account on T-lymphocytes. 2½

q) Write a note on Innate immunity. 2½

- r) Discuss about Radial immunodiffusion method. 2½
- s) Write short note on dendrogram. 2½

5. Solve **any ten** of the following.

- a) Which antibody is known as secretory antibody? 1
- b) Define Passive immunity. 1
- c) Which antibody is responsible for Anaphylaxis? 1
- d) Give the full form of ADCC. 1
- e) What is the importance of MHC? 1
- f) Define Hypersensitivity. 1
- g) What is passive agglutination? 1
- h) Which disease is diagnosed by VDRL test? 1
- i) Which enzymes are used in ELISA test? 1
- j) Define median. 1
- k) What is standard deviation? 1
