

USBCT-C04 - Biochemistry Paper-II : Clinical Biochemistry and Immunology

P. Pages : 2

Time : Three Hours



GUG/W/23/11571

Max. Marks : 50

Notes : 1. All questions are compulsory and carry equal marks.

1. Describe in detail the structure and function of the liver. **10**

OR

Write short notes on.

- a) Albumin: Globulin ratio. **2½**
- b) Liver cirrhosis. **2½**
- c) Clinical significance of alkaline phosphatase. **2½**
- d) Clinical significance of SGPT. **2½**

2. Explain the mechanism of urine formation. **10**

OR

Write short notes on:

- a) Creatinine clearance test. **2½**
- b) Glomerular nephritis. **2½**
- c) Role of the kidney to maintain acid-base balance in the body. **2½**
- d) Structure of nephron. **2½**

3. Explain the structure and function of the primary lymphoid organ. **10**

OR

- a) Describe the structure of IgG. **2½**
- b) Write a short note on humoral immune response. **2½**
- c) What are the different functions of T & B cells? **2½**
- d) Explain in short- cell mediated immunity. **2½**

4. Discuss Hybridoma technology and give its applications in immunodiagnosis. 10

OR

Write a short note on.

- a) Mechanism of immunoprecipitation. 2½
- b) Describe the technique of ELISA. 2½
- c) Write in brief on hypersensitivity reactions. 2½
- d) Discuss the concept of immunotolerance. 2½

5. Attempt **any 10** of the following.

- a) What is hippuric acid? 1
- b) What is SGOT? 1
- c) What is hepatitis? 1
- d) What is GFR? 1
- e) Name the enzyme which maintains acid-base balance? 1
- f) What is alkalosis? 1
- g) What do you mean by heavy chain & light chain of antibody? 1
- h) What is Antigen? 1
- i) Define Immunity. 1
- j) What is Agglutination? 1
- k) What is HAT medium? 1
- l) Give the full form of RIA. 1
