

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

P. Pages : 2

Time : Three Hours



GUG/W/24/11571

Max. Marks : 50

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- Notes : 1. All questions are compulsory.
2. All questions carry equal marks.

1. Discuss in detail structure and function of liver. **10**

OR

- a) Write a note on jaundice. **2½**
- b) Discuss bromsulphthalein tests to assess liver function test. **2½**
- c) Give Clinical significance of Serum SGOT. **2½**
- d) Discuss the role of alkaline phosphatase in liver disease. **2½**

2. Discuss in detail the formation of urine in kidneys. **10**

OR

- a) Draw the structure of nephron. **2½**
- b) Enlist the normal and abnormal constituents of urine. **2½**
- c) Discuss the role of kidney to maintain acid-base balance. **2½**
- d) Discuss the urea clearance test. **2½**

3. Discuss in detail basic structure of IgG. **10**

OR

Write a note on:

- a) Thymus **2½**
- b) Bone marrow **2½**
- c) Spleen **2½**
- d) Lymph node. **2½**

4. Discuss in detail Radioimmunoassay. 10

OR

- a) Write a note on agglutination. 2½
- b) What is monoclonal antibodies? Discuss the preparation of monoclonal antibodies. 2½
- c) Discuss hypersensitivity reactions with one example. 2½
- d) Discuss the types of ELISA. 2½

5. Solve **any ten** from following.

- a) Name the marker used to assess liver function related to heme metabolism. 1
- b) What is Icterus index? 1
- c) Albumin is solely synthesized by ----- 1
- d) Name the hormone synthesized by kidney. 1
- e) Name two waste product excreted by kidney. 1
- f) Give full form of GFR. 1
- g) Define Antigen 1
- h) Define Adjuvant 1
- i) Synthesis of T-Cell occurs in ----- and maturation occurs in ----- 1
- j) Define hybridomas. 1
- k) Who discovered clonal selection theory? 1
- l) Give one example of immunoprecipitation. 1
