

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

P. Pages : 2

Time : Three Hours



GUG/S/25/11571

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks
2. Draw well labelled diagrams wherever necessary

1. What is the importance of various liver function tests? Describe the following tests in detail : **10**

- i) Hippuric acid test
- ii) Bromsulphthalein test

OR

- a) What are the different functions of liver? **2½**
 - b) Write a note on hepatitis. **2½**
 - c) What is the significance of alkaline phosphatase in liver diseases? **2½**
 - d) Write a note on liver cirrhosis. **2½**
- 2.** Give a detailed description of the process of urine formation. **10**

OR

- a) Write a note on structure of nephron. **2½**
 - b) Explain the creatinine clearance test. **2½**
 - c) Write a note on glomerular nephritis. **2½**
 - d) Write about the abnormal constituents of urine. **2½**
- 3.** Describe the properties of IgG. **10**

OR

- a) Write a note on IgA. **2½**
 - b) Write a note on T lymphocyte formation. **2½**
 - c) Draw a well labelled diagram of Thymus. **2½**
 - d) Discuss the functions of B lymphocytes. **2½**
- 4.** Explain the production of monoclonal antibodies and give it's applications. **10**

OR

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| a) | Write a note on immune tolerance. | 2½ |
| b) | Explain the agglutination reaction in brief. | 2½ |
| c) | Describe the immunodiagnostic technique- ELISA. | 2½ |
| d) | Discuss in brief about the hypersensitivity reactions. | 2½ |

5. Answer **any ten** of the following: (One mark each)

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|----|---|---|
| a) | What is double immunodiffusion? | 1 |
| b) | Name any one autoimmune disorder. | 1 |
| c) | What is immunoprecipitation? | 1 |
| d) | Define epitope and paratope. | 1 |
| e) | What is hapten? | 1 |
| f) | What are the 'Sensitized cells'? | 1 |
| g) | What is the clinical significance of phenol red test? | 1 |
| h) | What is alkalosis? | 1 |
| i) | What is standard urea clearance? | 1 |
| j) | What is meant by conjugated bilirubin? | 1 |
| k) | What is the clinical significance of SGOT in liver disorders? | 1 |
| l) | What is the causative agent of Hepatitis? | 1 |
