

Code: 202383

Reg. No.....

**Second Year M.Sc. MLT Degree Regular/Supplementary Examinations  
February 2022  
(Biochemistry)**

**Paper VI - Diagnostic Biochemistry, Recent Advances in Clinical Chemistry and  
Biostatics**

**Time: 3 hrs.**

**Max. marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays:**

**(10x10=100)**

1. Enumerate the functions of liver. Discuss the hepatic enzyme panel in various clinical conditions. (3+7)
2. Explain in detail about the first line of defence against acid load in the body
3. Describe the quality management & quality assurance in clinical chemistry laboratories.
4. What is POCT. Mention the analytes which can be analyzed by using POCT devices. Discuss the analytical principles of single use strip tests. (2+3+5)
5. Explain in detail about the chi square test and its applications.
6. Discuss about foetoplacental function tests.
7. Describe the performance criteria required for selection of a better quality fully automated clinical chemistry analyzer in a laboratory.
8. Mention the exogenous sources of Carbon monoxide. Describe the toxic effect when it is inhaled and add a note on the most accurate method for the estimation of carboxy haemoglobin. (2+5+3)
9. Explain the differences between normal cell and tumour cell.
10. Draw and label the structure of Human Immunodeficiency Virus. Write briefly about the laboratory analysis of HIV infection.

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