

**QP Code: 202383**

**Reg. No.....**

**Second Year M.Sc. MLT Degree Regular/Supplementary Examinations  
September 2024  
(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. Classify liver function tests. Discuss in detail about the tests to assess the excretory functions of liver. (4+6)
2. What is proteinuria. Describe the different types of proteinuria and add a note on protein creatinine ratio. (1+7+2)
3. Discuss the renal mechanism for regulation of blood pH.
4. Explain the chronic complications of diabetes mellitus and add a note on long term monitoring of diabetes mellitus. (6+4)
5. Discuss about proficiency testing for quality control programs in clinical chemistry laboratory.
6. What is ageing. Discuss the theories related to ageing. (2+8)
7. Discuss the action of salicylates in pharmacological dose and in toxic dose. Write briefly about estimation of salicylate in serum. (6+4)
8. Name the muscle proteins. Describe cardiac troponins in detail and write briefly about its clinical relevance. (2+5+3)
9. What are oncogenes and give examples. Describe in detail about the molecular mechanism of activation. (1+2+7)
10. What are acute phase proteins/ Mention the different types with examples and add a note on alpha 1 antitrypsin. (2+3+5)

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