QP Code: 202383 **Reg. No……**

Second Year M.Sc. MLT Degree Regular/Supplementary Examinations September 2023
(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. Explain the biochemistry of AIDS and its laboratory analysis.
2. Explain the pathophysiology of cancer with emphasis on oncogenes, proto oncogenes, tumor suppressor genes and carcinogens.
3. Mention the components of renal calculi. Explain the mechanism of calculi formation and the chemical tests for analysis of calculi. (2+3+5)
4. Explain the role of blood buffers in regulation of acid base balance.
5. Give the indications, precautions, principle and procedure of oral glucose tolerance test. How do you interpret the results of GTT. (1+1+1+4+3)
6. Describe the free radical theory of ageing.
7. Enumerate any five anticancer drugs, give their mechanism of action.
8. Discuss the clinical significance of assays of serum enzymes as liver function tests. Mention the assay methods for any three liver function marker enzymes.
9. Classify the renal function tests. Give the diagnostic importance of creatinine, urea and cystatin C. (2+3+3+2)
10. Describe the importance of creatine kinase and cardiac troponins in the diagnosis of myocardial infarction. Give the principles of their assay methods. (3+4+3)

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