Rajiv Gandhi University of Health Sciences

Second Year M.Sc. (MLT) Degree Examination - May 2011

[Time: 3 Hours] [Max. Marks: 100]

BIOCHEMISTRY - II

Paper - I

Q.P. CODE: 9674

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary. **Section A and section B are to be written in same Answer Book**

Section A – Clinical Biochemistry [50 marks]

LONG ESSAY 1 X 20 = 20 Marks

1. Explain in detail the role of lung and kidney in the maintenance of acid-base metabolism of our body. What are the causes, biochemical manifestations and compensatory mechanism of acid-base disturbances?

SHORT ESSAY 3 X10= 30 Marks

2. Write a short note on automation and point of care testing (POCT).
3. What are tumor biomarkers? Explain the classification and disturbution of protein and carbohydrate tumor markers.
4. Explain the principle of chromatography and explain in detail Affinity chromatography.

Section B – Pharmacological Biochemistry [50 marks]

LONG ESSAY 1 X 20 = 20 Marks

5. Discuss the principles and practice of therapeutic drug monitoring of antidepressants, mood stabilizers and antipsychotics.

SHORT ESSAY 3 X 10 = 30 Marks

6. What are the differences between the first and zero order kinetics of drug elimination?
7. List the national academy of clinical Biochemistry guidelines for emergency toxicology.
8. Discuss in brief the major drugs of abuse and their clinical manifestations.

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