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**CL—07—2019**

**FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY**

**D Pharm. (First Year) EXAMINATION**

**MARCH/APRIL, 2019**

**MEDICINAL BIOCHEMISTRY**

Paper 1.3

**(Friday, 26-4-2019)**

**Time : 10.00 a.m. to 1.00 p.m.**

*Time—3 Hours*

*Maximum Marks—70*

*N.B. :— (i) All questions are compulsory.*

*(ii) Figures to the right indicate full marks.*

*(iii) Answer to the point only.*

1. Answer the following (any *five*) : 5×2=10
- (a) Enlist various lipid profile test.
  - (b) State factors affecting calcium absorption.
  - (c) Write short note on biomolecules.
  - (d) Define the terms Nucleotides and Nucleosides.
  - (e) Define the following :
    - (1) Co-enzyme
    - (2) Apo-enzyme.
  - (f) Write the difference between RIA and ELISA.
  - (g) Discuss the terms “Dehydration” and “Overhydration”
2. Answer the following (any *two*) : 2×6=12
- (a) Give sources, biochemical function and diseases of sodium.
  - (b) Discuss in brief different laboratory investigation employed to evaluate liver function.
  - (c) Write the principle, techniques and application of ELISA.

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3. Answer the following (any *two*) : 2×6=12
- (a) Describe in detail various transport processes across the cell membrane.
  - (b) What are enzymes ? Explain the factors affecting enzyme action.
  - (c) Explain in detail electron transport chain.
4. Answer the following (any *two*) : 2×6=12
- (a) Explain in detail about reaction involved in the synthesis of urea.
  - (b) Give an account of  $\beta$ -oxidation of fatty acid with its energetics.
  - (c) Define Isoenzymes. Give their clinical importance with example.
5. Answer the following (any *two*) : 2×6=12
- (a) Enumerate function of kidney. Discuss in detail various test to assess kidney function.
  - (b) Define fatty acid. Write in brief biosynthesis of fatty acids.
  - (c) Explain in brief various steps of TCA cycle with its energetic.
6. Answer the following (any *two*) : 2×6=12
- (a) Explain in detail major steps involved in protein synthesis.
  - (b) Describe in detail Glycolysis pathway with its energetics under both aerobic and anaerobic condition.
  - (c) Explain in detail steps involved in DNA replication.