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**DE—5—2018**

**FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY**

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

**MARCH/APRIL, 2018**

**MEDICINAL BIOCHEMISTRY**

**(Wednesday, 25-4-2018)**

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

*Time—Three 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.*

*(iv) Illustrate your answer with neat sketches wherever necessary.*

1. Solve any *five* of the following questions : 10

(a) Write the hormonal regulation of cholesterol synthesis.

(b) Define the terms transamination and deamination.

(c) Write the therapeutic uses of enzymes.

(d) What is porphoria ?

(e) What are Okazaki fragments and primers ?

(f) Write the different between RIA and ELISA.

(g) Write the functions of Lipo proteins.

2. Solve any *two* of the following : 2×6=12

(a) What is enzyme ? Classify it with suitable examples.

(b) Write in detail about membrane transport system.

(c) What is diabetes mellitus ? Write etiology, pathophysiology, clinical manifestation and treatment of diabetes mellitus.

3. Solve any *two* of the following : 2×6=12

(a) Describe the TCA cycle with its energetics.

(b) What is gluconeogenesis ? Give schematic representation of it.

(c) What is genetic code ? Explain the nature of genetic code.

P.T.O.

4. Solve any *two* of the following : 2×6=12
- (a) Give the schematic representation of ketogenesis and ketolysis.
  - (b) Explain  $\beta$ -oxidation of palmitic acid with energetics.
  - (c) Describe in detail about steps in protein synthesis.
5. Solve any *two* of the following : 2×6=12
- (a) Write the metabolic pathways for synthesis of cholesterol.
  - (b) Explain in detail about Krebs-Henseleit cycle and write its metabolic disorders.
  - (c) Write in detail about DNA Replication process.
6. Solve any *two* of the following : 2×6=12
- (a) Write the principle techniques and application of ELISA.
  - (b) What is liver function test ? Classify it and describe any *two* test in detail.
  - (c) Describe in detail about regulation of fluid balance.