

SUBJECT: PHARMACEUTICAL BIOCHEMISTRY-II

Day : Thursday  
Date : 25/04/2019

S-2019-4383

Time : 02.00 PM TO 05.00 PM  
Max. Marks: 60.

**N.B.:**

- 1) Q. No. 1 and Q. No. 5 are **COMPULSORY**. Out of the remaining attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.

**SECTION-I**

- Q.1** Attempt **ANY FIVE** of the following: (10)
- a) State structure of ATP?
  - b) How oxaloacetate is formed from aspartate?
  - c) What are biological redox systems? Give one example.
  - d) What is substrate level phosphorylation?
  - e) What is oxidative deamination? Give one example
  - f) What are PUFA? Give one example.
- Q.2** a) Describe various metabolic fate of pyruvate. (07)  
b) State the number of ATP formed when one mole of glucose is completely oxidized to carbon dioxide and water by glycolysis followed by TCA cycle. (03)
- Q.3** a) What is pentose phosphate pathway? Explain in detail. (07)  
b) What is gluconeogenesis? State its metabolic importance. (03)
- Q.4** Write short note on **ANY TWO** of the following: (10)
- a) Lactose intolerance.
  - b) Purine catabolism.
  - c) Plasma lipoproteins.

**SECTION-II**

- Q.5** Attempt **ANY FIVE** of the following: (10)
- a) State biochemical role of vitamin B1?
  - b) What is point mutation?
  - c) What clinical hyperglycemia?
  - d) State biosynthesis of malonyl CoA.
  - e) What are restriction sites?
  - f) State biosynthesis of serotonin?
- Q.6** a) Describe urea cycle in detail. (07)  
b) What is immno-precipitation? (03)
- Q.7** a) What is DNA recombination? Explain in detail (07)  
b) Biochemical role of Vitamin B<sub>12</sub>. (03)
- Q.8** Write short note on **ANY TWO** of the following: (10)
- a) Primer selection in PCR
  - b) ELISA
  - c) r-DNA Proteins