

SUBJECT : BIOCHEMISTRY

Day : Monday
Date : 08/04/2019

S-2019-1203

Time : 03.00 PM TO 06.00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Draw diagrams **WHEREVER** necessary.

- Q.1** Describe the structural features and chemistry of DNA with reference to following (15)
- Watson and Crick model
- A, B and Z form

OR

Explain the structure and working of
- potassium channel
- sodium – potassium pump

- Q.2** a) Describe various types of membrane lipids. (07)
b) Diagrammatically illustrate the D-series of ketoses. (08)

- Q.3** Attempt **ANY THREE** of the following. (15)
a) Write a note on α -helix of polypeptide.
b) Describe various types and functions of prostaglandins.
c) Explain, Biochemistry as interdisciplinary subject.
d) What are high energy compounds? Write two examples.
e) Write a note on : Classification of amino acids.

- Q.4** Attempt **ANY THREE** of the following. (15)
a) Describe method for generation of overlapping peptide fragments and its use in protein sequencing.
b) What are disaccharides? Give their functions.
c) Write nomenclature system and types of fatty acids.
d) Write with examples ~~of~~ any two functional groups found in biomolecules.
e) What are sugar alcohols? Give their uses.

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