

M. SC. (MICROBIOLOGY) SEM-I (C.B.C.S.) (2012 COURSE) :

WINTER - 2017

SUBJECT: BIOCHEMISTRY

Day: Tuesday
Date: 24/10/2017

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

W-2017-0801

N.B.:

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

Q.1 Giving suitable examples explain the various mechanisms of solute transport across the cell membrane. (15)

OR

What are lipids? Discuss various types of lipids describing their structure and functions.

Q.2 a) Explain giving suitable examples the isomerism in sugars. (08)

b) Give structure and functions of t-RNA. (07)

Q.3 Attempt any **THREE** of the following: (15)

- a) What is T_m Value? Explain in brief the method used to determine T_m value.
- b) Write a note on: β- pleated sheet.
- c) Summarize the scope of biochemistry in life sciences.
- d) Give properties of amino acids.

Q.4 Attempt any **THREE** of the following: (15)

- a) Explain properties of z- form of DNA.
- b) Differentiate between reducing and non-reducing sugars.
- c) Explain in brief the structure of any one storage polysaccharide in plants and animals.
- d) Write any one method to detect the N- terminal of a polypeptide.

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