

Enrollment No: _____ Exam Seat No: _____

C.U.SHAH UNIVERSITY

Summer Examination-2017

Subject Name : Biochemistry

Subject Code : 4SC02BIC1

Branch: B.Sc.(Microbiology)

Semester : 2

Date : 12/05/2017

Time : 02:00 To 05:00

Marks : 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

- Q-1 Attempt the following questions: (14)**
- Draw the cyclic structures of D-glucose. (1)
 - What products will be produced by the acid hydrolysis of lactose? (1)
 - Give examples and structure of any one essential unsaturated fatty acid. (1)
 - Give the structural formula of stearic acid and oleic acid. (1)
 - Draw the structure of plasmalogen. (1)
 - Give example of semi essential amino acids. (1)
 - Define entropy. (1)
 - State first law of thermodynamics. (1)
 - Define enzyme specificity. (1)
 - What are the forces that stabilize quaternary structure of protein? (1)
 - Which phospholipid prevents the adherence of inner surfaces of lungs? (1)
 - Which polysaccharide is composed of β -glycosidic bond? (1)
 - What are essential amino acids? (1)
 - What is the role of metals in enzyme action? (1)

Attempt any four questions from Q-2 to Q-8

- Q-2 Attempt all questions (14)**
- Discuss classification of amino acids based on functional group present and polarity of R-group. (7)
 - Explain properties of amino acids. (7)
- Q-3 Attempt all questions (14)**
- Discuss thermodynamics of ATP hydrolysis. (7)
 - Write a note on transphosphorylation. (7)
- Q-4 Attempt all questions (14)**
- Write a note on different stereoisomers of D-glucose. (7)
 - Discuss the structure and functions of polysaccharides. (7)



