

S. No. of Question Paper

2272

Unique Paper Code

: 2531201

F-4

Name of the Paper

: Biochemistry (DCI-201)

Name of the Course

: Bachelor with Honours in Microbiology

Semester

: II

Duration: 3 Hours

Maximum Marks: 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt five questions in all.

Question no. 1 is compulsory.

All questions carry equal marks.

Attempt all parts of a question together.

1. (a) Give an example of **any twelve** of the following:

(1x12= 12)

- i. Isozyme
- ii. Lyase enzyme
- iii. Bacterial heteropolysaccharide
- iv. Non-protein amino acid
- v. Non-phosphorous energy rich compound
- vi. Acidic Glycosphingolipid
- vii. An amino acid that absorbs at 280nm.
- viii. A polyunsaturated fatty acid
- ix. A reagent used to stain amino acids
- x. Allosteric enzyme
- xi. Lipid as cell signal
- xii. A five carbon ketose sugar
- xiii. Storage lipid

(b) Define Gibb's free energy, enthalpy and entropy. Give the mathematical expression describing relationship among them.

(3)

2. Write short notes on **any three** of the following:

(5x3=15)

- i. Haemoglobin: structure and function
- ii. Titration curve of an amino acid and its significance
- iii. Phosphoglycerides