C 836 56 **(Pages : 2)** **Name**.....

Reg. No.....

SECOND SEMESTER M. Sc. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

General Biotechnology

GB 2C **1—METABOLISM AND** BASIC ENZYMOLOGY

Time : Three Hours Maximum : 36 Weightage

Section A (Very Short Answer)

Answer **all** *the ten questions with one* **or** *two sentences.*
Each question carries a weightage of 1.

1. Free energy.
2. Non-competitive inhibition.
3. Redox potential.
4. Metaloenzyme.
5. Immobilization.
6. Heteropolymere.
7. Disulfide bond.
8. Ribozyme.
9. Anaerobic glycolysis.
10. Coenzyme Q.

(10 x 1 = 10 weightage)

Section B (Short Answer)

Answer any **seven** *questions.*
Each question carries a weightage of 2.

11. Discuss about factors effecting enzyme activity.
12. Give an account on multienzyme complex with suitable example.
13. Explain Biosynthesis of purine.
14. Describe urea cycle and its significance.
15. Describe pentose phosphate pathway.
16. Give a brief account on regulation of metabolic pathways.
17. Discuss about β-oxidation of fatty acid.
18. Describe different types of immobilization.

Turn over

19. Explain purification methods for enzyme.

20. List out any *three* high energy compounds and explain how they generate.

(7 x 2 = 14 weighta

Section C (Essay Questions)

Answer any **two** *questions.*
Each question carries a weightage of **6.**

21. Explain classification and nomenclature of enzymes with suitable examples.

22. Describe electron transport chain and its significance.

23. Describe biosynthesis and degradation of any *two* amino acid.

(2 x **6** = 12 weightage)