

Roll No. 

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Total No. of Pages: 02

Total No. of Questions: 09

**B.Sc.(Agriculture) (2014 & Onwards) (Sem. – 1)**

**BIOCHEMISTRY**

**M Code: 72210**

**Subject Code: BSAG-103**

**Paper ID: [A3292]**

**Time: 3 Hrs.**

**Max. Marks: 60**

**INSTRUCTIONS TO CANDIDATES:**

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**SECTION A**

1. Define:

- a) Globular and fibrous proteins
- b) Soaps and waxes
- c) Steroids
- d) Polysaccharides
- e) Immobilized Enzymes
- f) Anabolism and catabolism
- g) Oxidative phosphorylation
- h) Terpenoids
- i) Essential and nonessential amino acids
- j) Biodiesel

## **SECTION B**

2. Write a note on Biodiesel.
3. Discuss energy yield via Glycolysis and Kreb's cycle.
4. What are the factors affecting Enzyme activity? Discuss.
5. Write a note on Applications of Immobilized Enzymes.
6. Discuss a pathway of glucose biosynthesis.

## **SECTION C**

7. What are the steps involved in Oxidative Phosphorylation?
8. Discuss mechanism of Fatty Acid Oxidation.
9. What are Secondary Metabolites? Discuss their industrial applications.