

**Roll No.....**  
**Total No. of Questions: [09]**

**Total No. of Printed Pages: [1]**

**B.Sc. Operation Theater Technology (Semester – 1st)**  
**APPLIED BIOCHEMISTRY**  
**Subject Code: BOTTS1102**  
**Paper ID: [20131902]**

**Time: 03 Hours** **Maximum Marks: 60**

**Instruction for candidates:**

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

**Section – A** **(2 marks each)**

- Q1. Explain the following terms in not more than 5 lines each:
- a) Ribosomes
  - b) Essential fatty acids
  - c) Amino acid
  - d) Balanced diet
  - e) ATP
  - f) Diabetes mellitus
  - g) Deamination
  - h) Atherosclerosis
  - i) Acetylcholine
  - j) Donnan membrane equilibrium

**Section – B** **(5 marks each)**

- Q2. What are enzymes? Discuss the factors that affect enzyme action.  
Q3. What are vitamins? Name fat soluble vitamins and discuss their functions.  
Q4. Discuss the diet for post-operative patients.  
Q5. What is transamination? Discuss its importance.  
Q6. Discuss the role of insulin and glucagon in blood glucose regulation.

**Section – C** **(10 marks each)**

- Q7. What are carbohydrates? Discuss different classes of carbohydrates.  
Q8. Discuss the steps of glycolysis in detail.  
Q9. What is acidosis? Discuss regulation of blood pH.