

**PARUL UNIVERSITY**  
**FACULTY OF APPLIED SCIENCE**  
**B.Sc Winter 2017-18 Examination**

**Semester: 5**  
**Subject Code: 11103303**  
**Subject Name: Nutritional Biochemistry**

**Date: 20/12/2017**  
**Time: 02:00 pm to 04:30 pm**  
**Total Marks: 60**

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**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1. A) Essay type: (08)**

How blood glucose level is regulated in human body? Explain the role of hormones involved.

**Q.1. B) Answer the following questions (Any two)**

- (a) Brief note (2x2) (04)
1. Omega fatty acids
  2. Blood lipids
- (b) Short note on Role of dietary fibre in diet (04)
- (c) Short note on effect of trans fatty acids in human diet (04)

**Q.2. A) Answer the following questions.**

- (a) Short note: Utilization of absorbed carbohydrates in the body (04)
- (b) Short note on Goitre (04)

**Q.2. B) Answer the following questions (Any two)**

- (a) Short note: Detoxification (03)
- (b) Enlist the causes of diabetes. (03)
- (c) What are biochemical functions of water? (03)

**Q.3. A) Essay type. (08)**

Explain the role of liver in lipid metabolism with special emphasis on transport and storage of lipids.

**Q.3. B) Answer the following questions (Any two)**

- (a) Short note: Nutritional significance of amino acids. (04)
- (b) Name atleast 4 essential amino acids with their functions. (04)
- (c) Write a short note on biochemical functions of fats. (04)

**Q.4. A) Answer the following questions.**

- (a) Short note on Cardiovascular Diseases and it's causes (04)
- (b) Short note on Protein Calorie Malnutrition (04)

**Q.4. B) Answer the following questions (Any two)**

- (a) Describe the causes of Anemia? (03)
- (b) Short note on Complimentary value of proteins (03)
- (c) Short note on disorders due to Zinc deficiency (03)