

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

Semester: 2
Subject Code: 11103151
Subject Name: Biochemistry II

Date: 11/05/2018
Time: 10:30AM TO 01:00PM
Total Marks: 60

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) Explain TCA cycle. (08)**
- Q.1. B) Answer the following questions (Any two)**
- (a) Give the flowchart of glycolysis (04)
 - (b) Explain the importance of HMP shunt. (04)
 - (c) Explain the Wald's visual cycle. (04)
- Q.2. A) Answer the following questions.**
- (a) Short note: Vitamin D (04)
 - (b) Short note: α oxidation (04)
- Q.2. B) Answer the following questions (Any two)**
- (a) Differentiate between saturated and unsaturated fats. (03)
 - (b) Differentiate between fat soluble and water soluble vitamins. (03)
 - (c) Give 3 examples of vitamin like compounds. (03)
- Q.3. A) Explain urea cycle (08)**
- Q.3. B) Answer the following questions (Any two)**
- (a) Describe deamination (04)
 - (b) Write a note on methionine (04)
 - (c) Write a note on PKU (04)
- Q.4. A) Answer the following questions.**
- (a) State the various classes of metabolic disorders. (04)
 - (b) Short note: Link between Urea cycle and TCA cycle. (04)
- Q.4. B) Answer the following questions (Any two)**
- (a) Differentiate between essential and non essential amino acids. (03)
 - (b) Why are amino acids called zwitter ions? (03)
 - (c) What are the disorders related to glycine metabolism? (03)