

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

Semester: 1
Subject Code:11109105
Subject Name: Biochemistry-1

Date: 20/12/2018
Time:10:30 to 01:pm
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) Essay type (4x2) (Each of 04 marks) (08)**
a) State the factors affecting BMR.
b) Define RDA and State the RDA value for pregnant and lactating women, children and sedentary workers.
- Q.1. B) Answer the following questions (Any two) (04)**
(a) Short note/ Brief note (2x2) (Each of 02 marks) (04)
1. What are thermogenic foods?
2. State the factors affecting thermic effect of food.
(b) Discuss the classification of enzymes (04)
(c) Write a short note on enzyme inhibitors (04)
- Q.2. A) Answer the following questions. (04)**
(a) Brief note (2x2) (Each of 02 marks) (04)
1. What is coenzyme? Give example.
2. What is BMR?.
(b) Discuss the factors effecting enzyme action. (04)
- Q.2. B) Answer the following questions (Any two) (03)**
(a) Short note (Each of 01 marks) (03)
1. Write down the general formula of carbohydrate.
2. Define essential amino acid with example.
3. Define non essential amino acid with example.
(b) Short note on digestion and absorption of carbohydrates (03)
(c) Discuss the functions of carbohydrate. (03)
- Q.3. A) Essay type (4x2) (Each of 04 marks) (08)**
a) Discuss the regulation of blood glucose level.
b) Write a short note on HMP Shunt.
- Q.3. B) Answer the following questions (Any two) (04)**
(a) Short note/ Brief note (2x2) (Each of 02 marks) (04)
1. Discuss Glycemic index and Glycemic load
(b) Differentiate between soluble fiber and insoluble fiber. (04)
(c) Discuss Biomedical importance of carbohydrate. (04)
- Q.4. A) Answer the following questions. (04)**
(a) Short note/ Brief note (2x2) (Each of 02 marks) (04)
1. Discuss classification of Protein.
(b) Short note on Glycogenesis. (04)
- Q.4. B) Answer the following questions (Any two) (03)**
(a) Short note (Each of 01 marks) (03)
1. What is PEM?
2. State the RDA value for pregnant and lactating women, sedentary workers?
3. Define Amino Acid.
(b) Explain various functions of proteins.. (03)
(c) Short note on Urea Cycle. (03)