

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc., Winter 2019-20 Examination

Semester: 1
Subject Code: 11213102
Subject Name: Biochemistry and Nutrition

Date: 02.12.2019
Time: 10:30am to 1:00pm
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) Brief note** (08)
- (a) Explain importance and scope of nutrition?
 - (b) Write in detail about digestion and absorption of protein?
- Q.1. B) Answer the following questions (Any two)** (04)
- (a) Short note (Each of 02 marks)
1. Net Protein utilization
 2. RDA
- (b) Write on perishable foods? (04)
- (c) Give importance food to our body? (04)
- Q.2. A) Answer the following questions.** (04)
- (a) Fill in the blanks. (Each of 02 marks)
1.causes deficiency of night blindness.
 2. Amino acids are building blocks ofnutrients.
- (b) Explain in detail digestion and absorption of carbohydrate? (04)
- Q.2. B) Answer the following questions (Any two)** (03)
- (a) Multiple choice questions. (Each of 01 marks)
1. Starch is _____type of carbohydrate?
 - a. Polysaccharide
 - b. Monosaccharide
 - c. Disaccharides
 - d. Oligosaccharide
 2. _____is milk protein?
 - a. Casein
 - b. Zein
 - c. Albumin
 - d. None of above
 3. Vitamins C also called as_____?
 - a. Malic acid
 - b. Citric acid
 - c. Picric acid
 - d. All of above
- (b) Explain in detail synthesis of amino acids? (03)
- (c) Write importance of balance diet? (03)
- Q.3. A) Brief note (4x2) (Each of 04 marks)** (08)
- (a) Explain the sources, requirements and functions of carbohydrates?
 - (b) Elaborate on deficiency of vitamins and minerals?
- Q.3. B) Answer the following questions (Any two)** (04)
- (a) Brief note (Each of 02 marks)
1. Classification of food on basis of energy content.
 2. Write down sources of protein.

(b) Explain digestive system of human body? (04)

(c) What are the steps involved nutritional assessment of human? (04)

Q.4. A) Answer the following questions.

(a) Fill in the blanks. (Each of 02 marks) (04)

1. _____enzyme breaks down most of protein in food?

2. 1 gm of protein gives _____calories?

(b) Write in detail respiratory system of human body? (04)

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

(a) Multiple choice questions. (Each of 01 marks) (03)

1. Function of food_____

- a) To give energy
- b) To give nutrients
- c) both A and B
- d) None of above

2. 1 gm of lipid gives _____calories

- a) 2
- b) 4
- c) 12
- d) 8

3. _____day of world Food day

- a) 12 January
- b) 16 December
- c) 16 October
- d) None of above

(b) Explain in detail metabolism of lipid? (03)

(c) Discuss on nutraceuticals and functional foods in detail? (03)