

2023
SRCMUJ
M.Sc.
1st Semester Examination
Nutrition and Public Health
MNPH-103
Nutritional Biochemistry

Full Marks: 40

Time: 2 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

1. Answer any four from the following questions. 2×4

- a) What is isoenzyme?
- b) Write the cause of black foot disease?
- c) What is Phrynoderma?
- d) What is sandwich ELISA?
- e) Define Zwitter ion?
- f) Write the tautomeric form of purine.

2. Answer any four from the following questions: 8×4

- a) Briefly describe about classification of amino acids. What are saturated and unsaturated fatty acids with example? 4+4
- b) Write the biomedical importance of carbohydrates. Discuss about anomers and reduction reaction of carbohydrate. 3+5
- c) What do you mean by artificial sweeteners? Give example. Discuss the biomedical importance of dietary fibre. 3+2+3
- d) Write the importance of iodine in our life. How sodium and potassium perform their functions as macro-mineral? Write the role of cobalt as a cofactor. 2+4+2
- e) State the function of vitamin D and its daily requirement. Discuss about four complexes in electron transport chain with diagram. Write the significance of oxidative phosphorylation. 3+3+2
- f) Draw the 'Michaelis Menten' equation. Illustrate the advantages and disadvantages of ELISA. Write the role of Vitamin C as an antioxidant. 3+3+2

P.Y.Q. 2023