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PG (CBCS)
M.Sc. Semester-I Examination, 2022
NUTRITION AND DIETETICS
 PAPER: NUD 103

(METABOLISM OF MACRO AND MICRO NUTRIENTS AND ITS MOLECULAR BASIS)

Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet

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

UNIT-5

METABOLISM OF MACRO NUTRIENTS AND ITS MOLECULAR BASIS

GROUP-A

Answer any **TWO** questions from the following:

2×2= 4

1. What is the fate of pyruvate?
2. Define alcoholic fermentation.
3. What is G6PD deficiency?
4. What do you mean by FAS?



GROUP-B

Answer any **TWO** questions from the following:

2×4 = 8

5. Write down the hormonal regulation of blood glucose.
6. Discuss the irreversible steps of glycolysis.
7. Discuss the elongation process in prokaryotic translation.
8. Write a short note on deamination.

GROUP-C

Answer any **ONE** question from the following:

1×8= 8

9. Describe the pathway of urea cycle with significance.
10. Give two examples of essential fatty acid. Describe the β -oxidation pathway of palmitic acid.

2+6

P.T.O.

(2)

UNIT-6**MICRONUTRIENTS IN NUTRITION****GROUP-A****Answer any TWO questions from the following:****2×2 = 4**

1. What is dental fluorosis?
2. What is neural tube defect?
3. Write the importance of vitamin C in prevention of chronic diseases.
4. Mention the effect zinc of deficiency.

GROUP-B**Answer any TWO questions from the following:****2×4 = 8**

5. Describe the role of vitamin B₁₂ in human reproduction.
6. Describe the metabolic pathway of iodine.
7. Write the role of calcium on bone formation. Mention the dietary sources of calcium.
3+1
8. How excess intake of sodium is related to the causation of hypertension? Write a brief note on hypernatremia.
2+2

GROUP-C**Answer any ONE question from the following:****1×8 = 8**

9. Describe the mechanism of iron absorption in human body. Mention the factors affecting iron absorption. What is haemochromatosis?
4+2+2
10. Write the role of iodine in growth and development. Mention the consequences of iodine deficiency. What is cretinism?
4+2+2
