

Roll Number:

SCHOOL OF CHEMICAL AND LIFE SCIENCES

Course code: BCR/BTX/BBC/BCH/BBO/BBT MDC 301

B.Sc. Semester III Examination (2024)

Paper Title: Nutrition in Health and Disease Management

TIME: 02:00 hours

Maximum Marks: 45

Write the roll no. at the top immediately on receipt of this question paper. Attempt all questions. All parts of the question must be attempted in continuation. Start the answer to the next question on a new page. Cite examples and draw labeled diagrams wherever necessary.

Section A

Answer all the following questions.

[1x10=10]

1. Obesity and diabetes are interlinked?
 - a) True
 - b) False
2. Which of the following is the most abundant biomolecule on earth?
 - a) Carbohydrates
 - b) Lipids
 - c) Proteins
 - d) Nucleic acids
3. Which of the following diseases caused by the deficiency of hemoglobin?
 - a) Malaria
 - b) Anemia
 - c) Typhoid
 - d) Cholera
4. Goitre occurs due to the deficiency of?
 - a) Iron
 - b) Potassium
 - c) Iodine
 - d) Phosphorus
5. Out of the following statements, which one is not true about nutrients in milk?
 - a) Milk is a good source of protein
 - b) Milk is a good source of vitamin
 - c) Milk is a good source of vitamin
 - d) Milk is a good source of calcium
6. Night blindness is caused by deficiency of?
 - a) Vitamin D
 - b) Vitamin A
 - c) Vitamin E
 - d) Vitamin K

7. Which of the following mineral function by building strong bones and teeth?
- Iodine
 - Calcium
 - Iron
 - None of the above
8. According to year 2020 in definition of Indian adult man, the age is?
- 20 to 39 years
 - 19 to 39 years
 - 18 to 39 years
 - 21 to 39 years
9. Which of the following food component is rich in fat?
- Rice & maize
 - Milk, egg & beans
 - Butter, cheese & oil
 - None of the above
10. The committee responsible for setting up of RDA in India is?
- WHO
 - ICMR
 - NIH
 - CDC

Section B

Attempt **all** questions from the following.

[5x1=5]

1. Define nutrition.
2. Write down formula for BMI.
3. What are LDL and HDL?
4. Name five essential amino acids.
5. Mention 4 sources of carbohydrates.

Section C

Answer **ANY One** of the following questions.

[10x1=10]

1. What is balanced diet? Write about benefits of balanced diet.
2. What are proteins? Explain briefly about the structure and functions of proteins. Also mention few sources of proteins.
3. What are micronutrients? Explain briefly about water soluble Vitamins.

Section D

Answer ANY 4 of the following questions.

[5x4=20]

1. What is RDA? Define it in reference to woman and what is their energy requirements.
2. Explain about protein malnutrition in children.
3. Differentiate between essential & non-essential nutrients.
4. What is hypertension? Write a note on DASH diet.
5. What is obesity? What is the best diet to prevent obesity.
6. Explain how is diet and lifestyle linked to cancer?

--X--