

- B) State whether True or False. If false, rewrite the statement after making necessary corrections in underlined words. (05)
- i) Riboflavin is a fat soluble vitamin.
  - ii) Goiter is a deficiency disease of iodine.
  - iii) Annatto is the natural coloring agent.
  - iv) Biological value of milk protein is higher than the egg protein.
  - v) Full form of IDF is Indian Dairy Federation.

**SECTION –‘B’**

- Q. 3 A) Define hormones. Give the classification of hormones. (05)  
B) Write the structure of vitamin A. Discuss its physiological function in night blindness. (05)
- Q. 4 A) Enumerate the functions of different nutrients in body. (05)  
B) Discuss the health benefits of cultured dairy products. Write a note on acidophilus milk. (05)
- Q. 5 A) Differentiate between the rickets and osteoporosis. (03)  
B) Briefly explain the milk hypersensitivity. (03)  
C) Write a note on nutraceutical foods. (04)
- Q. 6 A) Write a note on antibiotic residue in milk and milk products. (03)  
B) State the nutritional requirement during pregnancy. (03)  
C) State the concept of balanced diet. (04)
- Q. 7 Describe briefly the digestion and absorption process of carbohydrates and proteins in our body with neat labelled diagram. (10)

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**MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR**  
**SEMESTER END THEORY EXAMINATION, B.Tech. (D.T.)**

Semester	: III (V Dean)	Academic Year	: 2023-24
Course No.	: DC-304	Course Title	: Human Nutrition
Credits	: 1+1=2	Total Marks	: 50
Day & Date	: Monday, 29/04/2024	Time	: 2.00 hrs.

- Note :
- 1) All questions from Section 'A' are compulsory.
  - 2) Solve Any Three questions from Section 'B'.
  - 3) Draw neat and well labelled diagram wherever necessary.

**SECTION – 'A'**

Q. 1 A) Choose the most appropriate answer from the options given below. (05)

- i) Monosodium Glutamate is a type of .....
  - a) Flavor enhancer
  - b) Chelating agent
  - c) Coloring agent
  - d) Curing agent
- ii) The pH of human stomach content is .....
  - a) 5-6
  - b) <3
  - c) >10
  - d) 7-9
- iii) Father of nutrition of modern chemistry is .....
  - a) Max Rubner
  - b) James Sumner
  - c) Antoine Laurent de Lavoisier
  - d) W. Kuhne
- iv) The surface active agents that help to disperse two immiscible liquids to give suitable mixture .....
  - a) Thickening agent
  - b) Binding agent
  - c) Antioxidants
  - d) Emulsifiers
- v) Osteoporosis and osteomalacia are the symptoms seen due to deficiency of .....
  - a) Calcium
  - b) Phosphorus
  - c) Both a) and b)
  - d) None of these

B) Match the pairs. (05)

**Column 'A'**

- i) Inulin
- ii) Bisphenol A
- iii) Vitamin B<sub>12</sub>
- iv) Oxytocin
- v) Milk proteins

**Column 'B'**

- a) Hormone
- b) Allergen
- c) Dietary fiber
- d) Plastics
- e) Cobalt

Q. 2 A) Define the following terms. (05)

- i) Food toxins
- ii) Vitamin
- iii) Radionuclides
- iv) Functional foods
- v) Nutrition

(P.T.O.)