

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR
SEMESTER END THEORY EXAMINATION, B.Tech. Dairy Technology 2018-19

Semester : II (New Syllabus)

Academic Year : 2018-2019

Course No. : DC-204

Course Title : Biochemistry and
Human Nutrition

Credits : 2+1=3

Total Marks : 50

Day & Date : Thursday, 27.06.2019

Time : 11.00 to 13.00 Hrs.

- Note :**
- 1) All questions from **Section 'A'** are compulsory.
 - 2) Solve **Any Five** 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) Richest source of vitamin C is
 - a) Orange
 - b) Lemon
 - c) Tomato
 - d) Amla
- ii) Which vitamin is essential for blood clotting?
 - a) Vitamin A
 - b) Vitamin K
 - c) Vitamin C
 - d) Vitamin D
- iii) Emulsification of fat requires
 - a) Bile pigment
 - b) Bile salt
 - c) Sodium salt
 - d) Potassium salt
- iv) Coenzyme form of Riboflavin is
 - a) FAD
 - b) FMN
 - c) Both a and b
 - d) None of these
- v) Deficiency of thyroxine hormone leads to
 - a) Scurvey
 - b) Pellagra
 - c) Goitre
 - d) Diabetes

B) Define the following. (05)

- i) Coenzymes
- ii) Hormones
- iii) Toxic elements
- iv) Essential fatty acids
- v) Pellegra

Q. 2. A) Give two examples of following. (05)

- i) Antibiotics
- ii) TCA cycle enzymes
- iii) Isozymes
- iv) Regulatory bodies
- v) Antinutrients

- B) State whether True or False, If False, rewrite the statement after making necessary corrections. (05)
- i) Vitamin C is fat soluble vitamin.
 - ii) All enzymes are protein.
 - iii) Nutritional labeling is must.
 - iv) Glycolysis occurs in anaerobic conditions.
 - v) Pesticides occur in food inherently.

SECTION – 'B'

- Q. 3 Discuss the role of fat soluble vitamins in human nutrition. (06)
- Q. 4 Define the term nucleotides. Narrate the Watson and Crick model of DNA along with well labeled diagram. (06)
- Q. 5 Discuss in detail TCA cycle. (06)
- Q. 6
- A) What do you understand by IDF code of nutrition and NLEA nutrition facts? (02)
 - B) What is protein hypersensitivity? (02)
 - C) Discuss the occurrence of antibiotic residues in foods. (02)
- Q. 7
- A) Explain in brief the classification of hormones based on chemical structure. (03)
 - B) Discuss the role of nutrient descriptors and nutritional programmes. (03)
- Q. 8
- A) Write a short note on safety aspects of food additives. (02)
 - B) Define food additives and classify them. (02)
 - C) Discuss the assimilation of nutrients. (02)
- Q. 9
- A) What is enzyme an inhibition? Explain. (02)
 - B) Explain in details classification of enzymes. (04)
