

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR
SEMESTER END THEORY EXAMINATION, B.Tech. (D.T.) DEGREE COURSE 2018-19

Semester : III (V Dean)	Academic Year : 2018-2019
Course No. : DC - 304	Course Title : Human Nutrition
Credits : 1+1=2	Total Marks : 50
Day & Date : Friday, 04/01/2019	Time : 15.00 to 17.00 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) Define the following. (05)

- i) Catabolism
- ii) Digestion
- iii) Basal metabolic rate
- iv) Antibiotics residues
- v) Vitamins

B) Give two examples of the following. (05)

- i) Fat soluble vitamins
- ii) Toxic elements
- iii) Steroid hormones
- iv) Polysaccharides
- v) Chemical contaminants

Q. 2 A) State True or False, if false rewrite the statement after making necessary corrections. (05)

- i) Organochlorines are fat soluble pesticides.
- ii) Insulin is a protein hormone.
- iii) Carotenoids are vitamin A precursors.
- iv) Lactose intolerance is desirable.
- v) Milk is complete food.

B) Choose the most appropriate answer from the options given below. (05)

- i) Storage form of carbohydrate is
 - a) Glycogen
 - b) Sugar
 - c) Amino acid
 - d) Collagen
- ii) Provitamin of vitamin D₃
 - a) Ergosterol
 - b) 7-dehydrocholesterol
 - c) Cholecalciferol
 - d) Ergocalciferol
- iii) Milk is stored in
 - a) Pancreas
 - b) Gall bladder
 - c) Large intestine
 - d) Liver
- iv) Small intestine is made up of duodenum, jejunum and
 - a) Gall bladder
 - b) Pancreas
 - c) Esophagus
 - d) Ileum
- v) is the synthetic organic insecticides which is the most persistent and bio-accumulative.
 - a) Organochloro
 - b) Organophosphate
 - c) Organocarbamate
 - d) None of these

(P.T.O.)

SECTION – 'B'

- Q. 3. A) Define the term hormones and enlist their types. Explain in details functions of any two hormones with their structures. (05)
B) Define anti-nutritional factors? Discuss the anti-nutritional factors present in food. (05)
- Q. 4 A) Discuss the biological function and deficiency disease of vitamin A and D along with their structure. (05)
B) How the energy requirement of an individual can be calculated? (05)
- Q. 5 Write short notes on.
A) ICMR and WHO (03)
B) Milk intolerance (03)
C) Method of evaluation of nutritive value of food. (04)
- Q. 6 A) Discuss the health and economic aspects of antibiotic residues in milk. (05)
B) Write a note on nutraceuticals and cultured dairy products. (05)
- Q. 7 Explain in detail the digestion, absorption and assimilation process for different nutrients. (10)
