

Seat No. : \_\_\_\_\_

# AI-106

April -2018

B.Sc., Sem.-II

## CC-1 : Paper-103 : Healthy Hygiene (Food and Nutrition)

Time : 3 Hours]

[Max. Marks : 70

1. Answer any **two** of the following : 14
  - (A) Discuss Human dietary requirements and its consequences of deficiency.
  - (B) Explain Basal Metabolic Rate and its importance.
  - (C) Describe role to role of Iron in metabolism and symptoms of its deficit.
  - (D) Explain nutritional deficiencies causing Osteoporosis and its symptoms.
  
2. Answer any **two** of the following : 14
  - (A) Define 'Food Spoilage' and explain process of spoilage in Milk.
  - (B) List Physical methods for food preservation and explain any two in detail.
  - (C) Explain method for Pasteurization and its applications.
  - (D) Discuss mechanism for food preservation by chemicals Salt, Sugar and NaOH.
  
3. Answer any **two** of the following : 14
  - (A) Define food poisoning and explain causes and symptoms of food poisoning by Shigella.
  - (B) Write a detailed note on chemistry and effects of bacterial toxins.
  - (C) Discuss sources of food contamination and means to control it.
  - (D) Name four toxins of fungal origin and explain any one in detail.
  
4. Answer any **two** of the following : 14
  - (A) Explain method for Dye-reduction test form food sample and its significance.
  - (B) Discuss physical and chemical methods for detection of adulteration in food.
  - (C) Discuss use of nucleic acid Hybridization method in food analysis.
  - (D) Explain direct microscopic examination of food and information derived.

5. Answer the following in brief :

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- (1) Name two essential amino acids.
  - (2) Name two sources of protein-rich foods.
  - (3) What is Beriberi ?
  - (4) What is normal value of haemoglobin ?
  - (5) Name two chemical food preservatives.
  - (6) How does microflora enters meat ?
  - (7) How food is preserved by Lye (Sodium hydroxide) ?
  - (8) List microflora associated with grains.
  - (9) What is Botulism ?
  - (10) What is gastroenteritis ?
  - (11) Differentiate 'Food intoxication' and 'Food infection'.
  - (12) What is found by MPN test of food ?
  - (13) Name two methods to find viable cell number from food sample.
  - (14) Give full form of ELISA.
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