SH-I/Nutrition-102C-2(T)/19

B.Sc. Semester I (Honours) Examination, 2018-19 NUTRITION

Course Id: 12312 Course Code: SHNUT-102C-2(T)

Course Title: Food Science and Basic Nutrition I

Time: 1 Hour 15 Minutes Full Marks: 25

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions:

 $1 \times 5 = 5$

- (a) What do you mean by functional food?
- (b) Write the name of two sulphur containing amino acids.
- (c) What is resistant starch?
- (d) What is acid number of fat?
- (e) Give an example of aldotriose.
- (f) What is non-reducing sugar?
- (g) What is fibrous protein?
- (h) Mention the sources of soluble dietary fibre.
- **2.** Answer *any two* questions:

 $5 \times 2 = 10$

- (a) What do you mean by denaturation of protein? What are the effects of denaturation? 2+3=5
- (b) Write the physiological functions of food. What is primary undernutrition? 3+2=5
- (c) What is hydrogenation of fat? Describe hydrolysis of triglyceride. What is detergent? 2+2+1=5
- (d) What are pyranose and furanose isomers of carbohydrates? Write the ring structure of lactose. 3+2=5

3. Answer *any one* question:

 $10 \times 1 = 10$

- (a) Describe Kiliani synthesis. What is mutarotation? Write the mutarotation of glucose. 5+2+3=10
- (b) Classify amino acid based on polarity. What is amino acid score? Describe the Ninhydrin test of protein. What is PER? 3+2+3+2=10