



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 1st Semester Examination, 2022-23



FNTACOR01T-FOOD AND NUTRITION (CC1)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.*

Answer any four questions from the following

10×4 = 40

1. (a) What are phytochemicals and how are they beneficial for physiological system? 1+2
(b) Define thermic effect of food and explain the factors affecting it. 2+3
(c) Give the percentage of Kilocalories that should come from carbohydrate, fat and protein in a balanced diet. 2
2. (a) What is the difference between PAR and PAL? 2
(b) What do you mean by REE? 2
(c) Define RQ. 2
(d) What is energy balance? 2
(e) What do you mean by malnutrition? 2
3. (a) Discuss briefly the digestion and absorption mechanism of carbohydrate. 4+4
(b) What do you mean by chylomicron? 2
4. Write a short note on the toxic effects of excess consumption of vitamin-D. 5+5
Discuss the four food group system suggested by ICMR and explain the importance of it.
5. (a) Give the advantages of pressure cooking. 2
(b) Compare shallow fat frying and deep fat frying methods. 2
(c) Define poaching. Bring out the advantages of it. 2+2
(d) How is heat transferred in baking? 2
6. (a) What is emulsification of fat? 2
(b) Differentiate between gall bladder bile and liver bile. 2

- (c) What is the role of bile in food digestion? 2
- (d) Write the composition of gastric juice. 2
- (e) What do you understand by enterohepatic circulation? 2
7. (a) Explain the functions of calcium. 4
- (b) Give five sources of riboflavin. 2
- (c) Which vitamin is known as antiberiberi vitamin? 2
- (d) What do you mean by Wilson's disease? 2
8. (a) Mention the differences between probiotic and prebiotic. 2
- (b) What is favism? 2
- (c) Compare the nutritive value of rice and wheat. 2
- (d) What is meant by dietary fibre? Explain its functional significance. 1+3
9. (a) Define balanced diet. 2
- (b) In which aspects fish is superior to meat? 2
- (c) How does cooking vegetables affect its vitamin content? How can this loss be minimized or prevented? 2+2
- (d) What is MSG? 2

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