

11	What is the conversion factor in protein? a) 100/carbohydrate content c) 100/nitrogen	b) 100/hydrogen d) 100/oxygen	1.5 marks	CO1
12	Which amino acid is acidic in nature? a) Lysine c) Histidine	b) Arginine d) Aspartic	1.5 marks	CO5
13	Mineral present in Thyroxine a) Iron c) Iodine	b) Zinc d) Cobalt	1.5 marks	CO5
14	Mineral important for insulin function a) Zinc c) Cobalt	b) Copper d) Potassium	1.5 marks	CO1
15	Which mineral is act as antioxidant? a) Iron c) Selenium	b) Cobalt d) Boron	1.5 marks	CO5
16	Calcium deficiency in children leads to a) Osteoporosis c) Rickets	b) Osteomalacia d) Osteoarthritis	1.5 marks	CO5
17	Vitamins associated with genetic regulation a) Vitamin A and D c) Vitamin C and B2	b) Vitamin E and K d) Vitamin E and C	1.5 marks	CO1
18	Retinol palmitate is a a) Esterified form of vitamin A c) Ketonic form of vitamin A	b) Ethanoic form of vitamin A d) Aldehyde form of vitamin A	1.5 marks	CO5
19	What is the comparative biological activity of A2 in composition to A1 a) 60% c) 40%	b) 80% d) 70%	1.5 marks	CO1
20	Sources of colicalciferol a) Milk c) Chicken	b) Fish d) All the above	1.5 marks	CO5
SECTION B (4Qx5M=20 Marks)				
Q	Short Answer Type Question (5 marks each)		20 Marks	CO
1	What is rate of reaction? Factors affecting rate of rection? How it affects food?		5	CO3
2	What are recent trends in Food Science? Development in Food sector in India.		5	CO4
3	Why food and Nutrition is important for Human health? How is RDA associated with health?		5	CO1
4	Define carbohydrates? Classification of carbohydrates? Sources of carbohydrates?		5	CO2
SECTION C (2Qx15M=30 Marks)				
Q	Two case studies 15 marks each subsection		30 Marks	CO

1	A) What are the historical milestones in food proces? (5 marks) B) What are the food groupd? Explain different food groups with example. (5 marks) C) Describe about lipids? Different classifications of lipids with example? (5 marks)	15	CO3
2	If a Man carry out moderate physical activity with weight 65 kg and he consumes the following food materials: 100 g of wheat (75% CHO, 12 % protein, 3% fat), 200 ml standardised milk (protein 3%, CHO 5%, fat 4.5%), 30 g ghee(99.9% fat), 50 g pulses (protein 25%, CHO 60% and Fat 5%), 100 g apple (CHO 14%, protein 0.5% and fat 0.2%), 50 g potato (CHO 20%, Protein 2%, Fat 0.2), 50 g green leafy vegetable (20% CHO, 11% protein and 3.5% fat) and 120 g ethanol. a) Calculate the energy consumption and explain if he consumes a sufficient amount of energy? b) Elaborate about his protein requirement and he consumes the right amount of proteins?	15	CO2
SECTION- D (2Qx10M=20 Marks)			
Q	Long Answer type Questions (10 marks each)	20 Marks	CO
1	a) What do you mean by fat-soluble vitamins? b) Describe the functions, RDA values, sources and their deficiency diseases of vitamin A, E and K?	10	CO5
2	a) Importance of lipids in nutrition? Describe lipid digestion & absorption? b) Describe vitamin D? Types of vitamin D, sources and deficiency disease?	10	CO4