

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2022

Course: Meal Planning

Program: B.Sc. Food Nutrition & Dietetics

Course Code: HSCC3003

Semester : V

Duration : 3 Hours

Max. Marks : 100

Instructions:

Section A			
S. No.	Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q1	What are macronutrients?	1.5	CO2
Q2	Name three water soluble vitamins.	1.5	CO1
Q3	What is blanket fortification?	1.5	CO1
Q4	Assessment of blood creatinine levels in an individual is an example of a. Biochemical assessment b. Anthropometry assessment c. Clinical assessment d. Dietary status assessment	1.5	CO1
Q5	On complete oxidation, fat provide ___ kcal of energy to human body.	1.5	CO1
Q6	This component _____ accounts for ~60% of the daily energy expenditure from human body.	1.5	CO2
Q7	After implantation, the _____ develops and begins to provide nourishment to the developing embryo.	1.5	CO1
Q8	Name three good sources of folic acid.	1.5	CO1
Q9	State whether the statement is TRUE or FALSE. Sodium is the main solute in the ECF and regulates the ECF and plasma volumes. When the amount of sodium in the body increases, more water is retained in the body until the excess sodium is excreted.	1.5	CO2
Q10	Most of the iron is present as hemoglobin and myoglobin in this source of food a. Vegetables b. Flesh foods c. Navy beans d. Bread	1.5	CO3

Q11	State whether the statement is TRUE or FALSE. By the end of pregnancy, there is an increase in blood volume and decrease in hemoglobin concentration to enable the circulation of larger amount of blood.	1.5	CO1
Q12	What is ketogenesis?	1.5	CO1
Q13	Reduction of gastric acidity impair effective uptake of this nutrient a. Zinc b. Protein c. Calcium d. Potassium	1.5	CO3
Q14	What is glycolysis?	1.5	CO1
Q15	With the increase in length of infants, the proportion of _____ changes with the length of body.	1.5	CO1
Q16	This nutrient, _____ compete with iron during intestinal absorption.	1.5	CO1
Q17	This nutrient, _____ is necessary to fuel the fetal brain and to ensure that the protein needed for growth will not be broken down and used to make glucose.	1.5	CO2
Q18	What are the clinical symptoms which appear due to the deficiency of iodine in 'infants'?	1.5	CO2
Q19	Mention the dietary reference intake (DRI) to be considered if government wants to conduct country wide fortification of salt with iron.	1.5	CO5
Q20	What is colostrum?	1.5	CO6
Section B (4Qx5M=20 Marks)			
Q1	Discuss the physiological demands of iron and its nutrient needs during pregnancy.	5	CO2
Q2	Demonstrate the importance of breast milk for a newborn infant.	5	CO6
Q3	Differentiate between the terms 'food fortification', 'food enrichment' and 'food supplementation'.	5	CO3
Q4	Discuss the manufacture and secretion of hormones involved in milk production and release of milk from the mammary glands.	5	CO2
Section C (2Qx15M=30 Marks)			
Q1	Plant proteins usually contain one or two 'limiting amino acids.' a. What are limiting amino acids? 5 marks b. Discuss the importance of complementary proteins and state ways to complement limiting amino acids in a vegetarian diet . 10 marks	15	CO5

Q2	<p>Using given anthropometric measurements for a ‘moderately active’, ‘obese male’ of height – 164 cm and body weight – 78 kg, estimate his</p> <ol style="list-style-type: none"> a. BMI b. IBW c. Estimated energy intake d. Distribute the calories among protein, fats, and carbohydrates <p>Use following instructions for calculation:</p> <ol style="list-style-type: none"> i. Ideal body weight (use this formula: IBW for height, men: allow 48 kg for first 5 ft. (152 cm), add 2.7 kg for each additional inch) <p>RDA (use energy requirement as 30 Kcal/Kg/IBW/day to estimate energy required)</p>	15	CO4
Section D (2Qx10M=20 Marks)			
Q1	<ol style="list-style-type: none"> a. Discuss the importance of safety margins while formulating RDA for a nutrient. 5 marks b. Differentiate between EAR, RDA and TUL. 5 marks 	10	CO3
Q2	<p>Discuss the concept of food exchange list. 5 marks</p> <p>Construct the steps for formulating an effective meal plan. 5 marks</p>	10	CO6