

Name:	
Enrolment No:	

UPES
End Semester Examination, December 2023

Course: Nutrition through the lifecycle **Semester : V**
Program: Integrated (B.Sc.) - (M.Sc.) Nutrition and Dietetics **Duration : 3 Hours**
Course Code: HSND3011P **Max. Marks : 100**

Instructions:

Section A			
S. No.	Short answer questions/ MCQ/T&F (20Qx1.5M = 30 Marks)	Marks	COs
Q1	What are cephalocaudal and proximodistal growth patterns?	1.5	CO1
Q2	Infants whose birth weights are below normal when the length of pregnancy is considered, are defined as _____.	1.5	CO1
Q3	What is the primary role of the placenta during pregnancy? a. Oxygen transport b. Nutrient storage c. Hormone production d. Waste elimination	1.5	CO1
Q4	What is colostrum?	1.5	CO1
Q5	What is the RDA for calcium during lactation?	1.5	CO1
Q6	Those born before the completion of _____ weeks of gestation (the time between fertilization and birth) are called as preterm infants.	1.5	CO1
Q7	The food needs of children are so great in proportion to the size of their digestive tracts that it becomes important to: a. avoid liquids until after meals. b. serve only highly concentrated foods. c. provide megadose vitamin supplements. d. serve snacks in addition to meals.	1.5	CO1
Q8	How does BMR and body composition change as we age?	1.5	CO1
Q9	What is weaning? List down some common home-based instant foods for infants.	1.5	CO1
Q10	Which of the following statements best describes the role of undigested proteins in the gut of infants? a. Undigested proteins in the gut enhance nutrient absorption. b. Undigested proteins in the gut primarily contribute to infant growth. c. Provide immunity benefits due to the underdeveloped digestive system.	1.5	CO2

	d. Undigested proteins in the gut have no significant impact on infant health.		
Q11	What is the primary characteristic of anorexia nervosa, commonly observed in adolescence? a. Excessive food intake b. Binge-eating episodes c. Intentional restriction of food intake leading to low body weight d. Emotional overeating	1.5	CO2
Q12	If development does not occur during a critical period, the embryo can make up for this development later when more nutrients are available. Provide reasons for the answer. a. True b. False	1.5	CO3
Q13	State whether the statement is TRUE or FALSE. In the case of preterm infants, it is recommended that powdered formula should be freshly prepared for each feed and be fed within a period of 4 hr after preparation.	1.5	CO3
Q14	What is pregnancy induced hypertension?	1.5	CO3
Q15	Fluoride supplements are recommended for those between the ages of 6 months and 5 years whose drinking water is low in fluoride. State whether the statement is true or false and provide reason for the answer. a. True b. False	1.5	CO3
Q16	Children are likely experiencing growth wasting if their _____. a. length-for-age falls below the 5th percentile. b. BMI-for-age falls rises above the 75th percentile. c. weight-for-length falls below the 25th percentile. d. head circumference-for-age exceeds the 95th percentile.	1.5	CO3
Q17	How do calorie-restricted diets contribute to amenorrhea in young women, especially athletes? a. By increasing estrogen levels b. By promoting regular ovulation c. By disrupting hormonal balance d. By enhancing reproductive function	1.5	CO3
Q18	State in one line the impact of decreased kidney function on protein intake recommendations for aging individuals?	1.5	CO3
Q19	Why is calcium important for school-age children? a. It is not crucial for children's health. b. Insufficient intake may lead to weakened bones. c. Excess calcium causes tooth decay. d. It has small impact on overall growth.	1.5	CO4
Q20	How does aging commonly affect taste perception? a. Aging enhances taste sensitivity.	1.5	CO4

	<ul style="list-style-type: none"> b. Aging has no impact on taste. c. Aging often results in a decline in taste sensitivity. d. Aging leads to an increase in overall taste preferences. 		
Section B (4Qx5M=20 Marks)			
Q1	<ul style="list-style-type: none"> a. What is fetal origin hypothesis? 2.5 marks b. How does inadequate pre-pregnancy maternal nutrition impact fetal growth and development? 2.5 marks 	5	CO1
Q2	Discuss the physiology of menarche that led to the onset of menstruation in adolescent girls.	5	CO2
Q3	What are the key factors that influence breastfeeding or milk production in lactating mothers?	5	CO2
Q4	Discuss the factors contributing to the frequent occurrence of heartburn and constipation in pregnant women.	5	CO3
Section C (2Qx15M=30 Marks)			
Q1	<ul style="list-style-type: none"> a. What are critical periods? 3 marks b. Discuss in detail the first 2 phases of prenatal growth and development. 5 marks c. What essential nutrients are required for 'cell development' during fetal growth and elucidate the potential consequences on the offspring if these nutrients are inadequately consumed during pregnancy. 7 marks 	15	CO2
Q2	<p>Mrs. Smith has been in good health for most of her life and has now entered her senior years. She has retired from her job and lives alone in her own house. Lately, she has noticed several physiological and psychological changes that have started affecting her daily life.</p> <ul style="list-style-type: none"> a. What are the common physiological changes that occur with aging, and how do they affect an individual's daily life? b. Explore the psychological changes that often accompany aging, focusing on emotional well-being, cognitive function, social isolation, and stress/anxiety. c. What strategies and interventions can be employed to address the physiological and psychological challenges faced by elderly individuals like Mrs. Smith? 	15 (5 marks × 3)	CO4
Section D (2Qx10M=20 Marks)			
Q1	Explain the physiological mechanism involved in the act of lactation and breastfeeding.	10	CO1
Q2	<ul style="list-style-type: none"> a. Discuss the characteristics of school-age children and their nutritional implications. b. How can packed lunches and supplementary foods meet the nutritional needs of school-aged children? Explain using appropriate examples. 	10 (5 marks × 2)	CO3