


Name:			
Enrolment No:			
UPES			
End Semester Examination, December 2024			
Course: Nutrition Through the Lifecycle		Semester : III	
Program: BSc Food Nutrition and Dietetics		Duration : 3 Hours	
Course Code: HSND2011		Max. Marks: 100	
Instructions: Read all the questions carefully.			
S. No.	Section A	Marks	COs
	Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)		
Q 1	Define growth monitoring.	1.5	CO1
Q 2	What is small for gestational age?	1.5	CO2
Q 3	Define postpartum depression?	1.5	CO2
Q 4	Which behavior is commonly associated with bulimia nervosa? a. Persistent overeating without purging b. Binge eating followed by compensatory behaviors like vomiting c. Avoidance of all meals due to fear of gaining weight d. Excessive physical activity without dietary changes	1.5	CO1
Q 5	What physiological changes occur in blood volume and hemoglobin levels during pregnancy?	1.5	CO2
Q 6	State nutritional considerations to be kept in mind while planning complementary feeding for infants.	1.5	CO3
Q 7	With the increase in length of infants, the proportion of _____ changes with the length of body.	1.5	CO1
Q 8	Water is particularly crucial for infants because they have _____. a. less body surface area per pound of body weight than adults b. a slow metabolic rate c. very efficient kidneys d. proportionately more body water than adults	1.5	CO3
Q 9	State in one line the impact of high protein intake on kidney function in infants.	1.5	CO3
Q 10	Why is weaning important?	1.5	CO1
Q 11	What is Apgar scale?	1.5	CO1
Q 12	What do you understand by milestones?	1.5	CO1
Q 13	To maintain desirable iron status, breastfed infants after 6 months should receive iron supplementation. State whether the statement is true or false and provide reason for the answer. a. true b. false	1.5	CO3
Q 14	Children are likely experiencing growth stunting if their _____.	1.5	CO3

	<ul style="list-style-type: none"> a. length-for-age falls below the 5th percentile. b. BMI-for-age falls below the 25th percentile. c. weight-for-length rises above the 75th percentile. d. head circumference-for-age exceeds the 95th percentile. 		
Q 15	How does distorted body image lead to the development of eating disorders in teenagers?	1.5	CO3
Q 16	Differentiate between cephalocaudal and proximodistal patterns of development.	1.5	CO1
Q 17	Define hyperemesis gravidarum.	1.5	CO3
Q 18	State the physiological factors that contribute to heartburn during pregnancy.	1.5	CO3
Q 19	What is the effect of protein deficiency on prenatal development in the first trimester?	1.5	CO2
Q 20	<p>A baby is born prematurely at 32 weeks of gestation. At the baby's 6-month post-birth checkup, the healthcare provider wants to calculate the baby's gestation-adjusted age to assess developmental milestones.</p> <p>Calculate the baby's gestation-adjusted age with step-wise calculation.</p>	1.5	CO4
Section B (4Qx5M=20 Marks)			
Q 1	What is preconception care? Discuss the importance of preconception nutrition using the concept of DoHAD.	5	CO1
Q 2	<ul style="list-style-type: none"> a. What are teratogens? (1.5 marks) b. Discuss food allergies and how do they relate to anaphylactic shocks. (3.5 marks) 	5	CO3
Q 3	Describe the embryonic stage of prenatal development.	5	CO4
Q 4	How do specific components in breast milk contribute to long-term health benefits? State the limitations of formulas in replicating these effects.	5	CO3
Section C (2Qx15M=30 Marks)			
Q 1	<ul style="list-style-type: none"> a. Explain physiological changes occur during menarche and how do they contribute to the development of secondary sexual characteristics in females? (7.5 marks) b. Discuss the physiological changes in body composition, and organ development during infancy. (7.5 marks) 	15	CO3
Q 2	<p>Mrs. Sharma, a 72-year-old retired school teacher, reports feeling fatigued, experiencing joint pain, and having occasional digestive discomfort. Additionally, she finds climbing stairs more challenging due to shortness of breath.</p> <ul style="list-style-type: none"> a. Explain why aging leads to a change in body composition. How do these changes affect overall health? (3 marks) b. Describe what changes in the digestive system associated with aging could explain Mrs. Sharma's slowed digestion. (3 marks) 	15	CO4

	<p>c. Describe how the efficiency of kidney filtration is impacted by aging. (3 marks)</p> <p>d. Identify the age-related changes in the skeletal system that might account for Mrs. Sharma's reduced bone density and joint issues. (3 marks)</p> <p>e. Discuss how decreased cardiac output and lung capacity contribute to Mrs. Sharma's difficulty climbing stairs. (3 marks)</p>		
<p>Section D (2Qx10M=20 Marks)</p>			
Q 1	<p>A 30-year-old woman in her early pregnancy, asks for guidance on which nutrients are most important for foetal cell development and growth.</p> <p>a. As a healthcare provider, explain the significance of adequate folate, vitamin B12 and zinc intake before and during pregnancy. (5 marks)</p> <p>b. Discuss, at what stage does neural tube development occur, and how does it happen? What are the consequences of defective neural tube development? (5 marks)</p>	10	CO2
Q 2	<p>a. Discuss using a clear diagram, how the embryo receives its nutrition from the mother's body. (5 marks)</p> <p>b. Summarize the three main stages of birth. (5 marks)</p>	10	CO3