


<b>Name:</b>			
<b>Enrolment No:</b>			
<b>UPES</b> <b>End Semester Examination, December 2024</b>			
<b>Course: Nutrition Through the Lifecycle</b>		<b>Semester : V</b>	
<b>Program: Integrated BSc MSc Nutrition and Dietetics</b>		<b>Duration : 3 Hours</b>	
<b>Course Code: HSND3011P</b>		<b>Max. Marks: 100</b>	
<b>Instructions: Read all the questions carefully.</b>			
<b>S. No.</b>	<b>Section A</b> <b>Short answer questions/ MCQ/T&amp;F</b> <b>(20Qx1.5M= 30 Marks)</b>	<b>Marks</b>	<b>COs</b>
<b>Q 1</b>	Define growth monitoring.	<b>1.5</b>	<b>CO1</b>
<b>Q 2</b>	What do you understand by low birth weight?	<b>1.5</b>	<b>CO2</b>
<b>Q 3</b>	What is the significance of kangaroo mother care?	<b>1.5</b>	<b>CO2</b>
<b>Q 4</b>	Define blastocyst.	<b>1.5</b>	<b>CO1</b>
<b>Q 5</b>	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 amounts of blood.	<b>1.5</b>	<b>CO2</b>
<b>Q 6</b>	What roles do nature and nurture play in growth and development?	<b>1.5</b>	<b>CO3</b>
<b>Q 7</b>	With the increase in length of infants, the proportion of _____ changes with the length of body.	<b>1.5</b>	<b>CO1</b>
<b>Q 8</b>	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	<b>1.5</b>	<b>CO3</b>
<b>Q 9</b>	State in one line the impact of high protein intake on kidney function in older age.	<b>1.5</b>	<b>CO3</b>
<b>Q 10</b>	What is the role of umbilical cord?	<b>1.5</b>	<b>CO1</b>
<b>Q 11</b>	What do you understand by reflexes?	<b>1.5</b>	<b>CO1</b>
<b>Q 12</b>	What is Apgar scale?	<b>1.5</b>	<b>CO1</b>
<b>Q 13</b>	Define a. Lactobacillus bifidus b. Colostrum	<b>1.5</b>	<b>CO3</b>
<b>Q 14</b>	Children are likely experiencing wasting if their _____. a. length-for-age falls below the 5th percentile. b. BMI-for-age falls above the 25th percentile.	<b>1.5</b>	<b>CO3</b>

	c. weight-for-length rises below the 75th percentile. d. head circumference-for-age exceeds the 95th percentile.		
<b>Q 15</b>	How restricted diets lead to amenorrhea in young women, particularly athletes?	<b>1.5</b>	<b>CO3</b>
<b>Q 16</b>	During adulthood, nutrients are used primarily for growth and development of the body. a. true b. false	<b>1.5</b>	<b>CO1</b>
<b>Q 17</b>	What is pica?	<b>1.5</b>	<b>CO3</b>
<b>Q 18</b>	What is the role of amniotic sac?	<b>1.5</b>	<b>CO1</b>
<b>Q 19</b>	What are cephalocaudal and proximodistal patterns?	<b>1.5</b>	<b>CO2</b>
<b>Q 20</b>	Why is bonding between mother and the baby critical for optimal development of a preterm infant?	<b>1.5</b>	<b>CO4</b>
<b>Section B (4Qx5M=20 Marks)</b>			
<b>Q 1</b>	What is preconception care? Discuss the importance of critical window of opportunity.	<b>5</b>	<b>CO1</b>
<b>Q 2</b>	Explore the consequences of alcoholism on fetal health.	<b>5</b>	<b>CO3</b>
<b>Q 3</b>	a. Why heartburn commonly occurs during pregnancy? (2.5 marks) b. What is pregnancy induced hypertension? How pre-eclamptic toxemia affect fetal development? (2.5 marks)	<b>5</b>	<b>CO3</b>
<b>Q 4</b>	How does the physiology of breastfeeding support milk production and release?	<b>5</b>	<b>CO2</b>
<b>Section C (2Qx15M=30 Marks)</b>			
<b>Q 1</b>	a. What are the key factors that support successful breastfeeding, and what barriers can hinder it? (7.5 marks) b. Why is weaning important, and what nutritional considerations should be kept in mind while planning complementary feeding for infants? (7.5 marks)	<b>15</b>	<b>CO3</b>
<b>Q 2</b>	Mrs. Verma is a 72-year-old retired school teacher who has been experiencing fatigue, joint pain, and occasional digestive discomfort. She reports that she feels weaker than she used to, has lost some muscle mass, and has noticed an increase in body fat despite no significant change in her diet. She also experiences frequent urination at night and finds it harder to climb stairs due to breathlessness.  a. Why does Mrs. Verma experience a loss of muscle mass and an increase in body fat as she ages? How can this impact her overall health? (3 marks) b. What age-related changes in the digestive system might contribute to Mrs. Verma's slower motility and occasional digestive discomfort? (3 marks) c. How does aging affect kidney filtration efficiency? (3 marks) d. What physiological changes in the skeletal system are responsible for Mrs. Verma's reduced bone density and joint degeneration? (3 marks)	<b>15</b>	<b>CO4</b>

	e. How do reduced cardiac output and lung capacity contribute to Mrs. Verma's difficulty climbing stairs and breathlessness? (3 marks)		
<b>Section D</b> <b>(2Qx10M=20 Marks)</b>			
<b>Q 1</b>	Illustrate the course of prenatal development.	<b>10</b>	<b>CO2</b>
<b>Q 2</b>	a. Discuss using a clear diagram, how the embryo receives its nutrition from the mother's body. (5 marks) b. Discuss different birth strategies. (5 marks)	<b>10</b>	<b>CO3</b>