


Name:			
Enrolment No:			
<b>UPES</b> <b>End Semester Examination, May 2024</b>			
<b>Course: Nutrition Therapy in Disease</b> <b>Program: B.Sc. Food Nutrition and Dietetics</b> <b>Course Code: HSCC2029</b>		<b>Semester : IV</b> <b>Duration : 3 Hours</b> <b>Max. Marks : 100</b>	
<b>Instructions: Read all the questions carefully.</b>			
<b>Section A</b>			
S. No.	Short answer questions/ MCQ/T&F (20Qx1.5M = 30 Marks)	Marks	COs
Q1	What is the primary goal of nutrition support in clinical settings? a. Weight loss b. Maintenance of nutritional status c. Promotion of sedentary lifestyle d. Reduction of water intake	1.5	CO1
Q2	Which feeding route is preferred when the gastrointestinal tract is functional but oral intake is inadequate? a. Parenteral nutrition b. Intravenous nutrition c. Enteral nutrition d. Transdermal nutrition	1.5	CO1
Q3	What is the purpose of nutritional screening in healthcare settings? a. To identify individuals at risk of malnutrition b. To prescribe dietary supplements to everyone c. To increase healthcare costs d. To ignore nutritional status	1.5	CO1
Q4	Which of the following is a primary complication of Type I Diabetes? a. Hypertension b. Hyperglycemia c. Atherosclerosis d. Osteoporosis	1.5	CO1
Q5	What is the recommended dietary management for patients with chronic kidney disease (CKD)? a. High protein, low potassium diet b. Low protein, high potassium diet c. Low protein, low potassium diet d. High protein, high potassium diet	1.5	CO1
Q6	What is the primary dietary goal for individuals with acute kidney injury (AKI)? a. Increase protein intake	1.5	CO1

	<ul style="list-style-type: none"> <li>b. Restrict fluid intake</li> <li>c. Increase potassium intake</li> <li>d. Decrease phosphorus intake</li> </ul>		
Q7	<p>Which of the following is a characteristic of a hospice diet?</p> <ul style="list-style-type: none"> <li>a. High in calories and protein</li> <li>b. Low in fiber and fluids</li> <li>c. Balanced in carbohydrates and fats</li> <li>d. Moderate in sodium and potassium</li> </ul>	1.5	CO2
Q8	<p>What is the primary dietary recommendation for patients with heart failure?</p> <ul style="list-style-type: none"> <li>a. Limiting sodium intake</li> <li>b. Increasing potassium intake</li> <li>c. Consuming more saturated fat</li> <li>d. Avoiding carbohydrates</li> </ul>	1.5	CO2
Q9	<p>What is the primary purpose of nutritional monitoring?</p> <ul style="list-style-type: none"> <li>a. To track changes in nutritional status over time</li> <li>b. To ensure patients are following dietary recommendations</li> <li>c. To prevent patients from eating unhealthy foods</li> <li>d. To administer medications</li> </ul>	1.5	CO2
Q10	<p>Which cardiac procedure involves the insertion of a mesh tube to open narrowed arteries?</p> <ul style="list-style-type: none"> <li>a. Angioplasty</li> <li>b. Bypass surgery</li> <li>c. Stent placement</li> <li>d. Valve replacement</li> </ul>	1.5	CO2
Q11	<p>Which of the following is a complication of acute kidney injury?</p> <ul style="list-style-type: none"> <li>a. Hypovolemia</li> <li>b. Hypertension</li> <li>c. Metabolic acidosis</li> <li>d. Hyperkalemia</li> </ul>	1.5	CO2
Q12	<p>Which electrolyte imbalance is commonly seen in patients with kidney failure?</p> <ul style="list-style-type: none"> <li>a. Hyperkalemia</li> <li>b. Hyponatremia</li> <li>c. Hypocalcemia</li> <li>d. Hypomagnesemia</li> </ul>	1.5	CO2
Q13	<p>What is the recommended approach to manage hyperglycemia in Diabetes Mellitus?</p> <ul style="list-style-type: none"> <li>a. Decreasing insulin dosage</li> <li>b. Increasing carbohydrate intake</li> <li>c. Administering glucagon injection</li> <li>d. Adjusting insulin dosage and dietary modifications</li> </ul>	1.5	CO2
Q14	<p>What role does inflammation play in the development of atherosclerosis?</p> <ul style="list-style-type: none"> <li>a. It accelerates plaque formation</li> <li>b. It reduces cholesterol levels</li> <li>c. It improves blood circulation</li> </ul>	1.5	CO2

	d. It has no impact on atherosclerosis		
Q15	Which condition involves blockage of blood flow mainly in the legs and pelvis? a. Coronary artery disease (CAD) b. Peripheral arterial disease (PAD) c. Deep vein thrombosis (DVT) d. Aortic aneurysm	1.5	CO2
Q16	List down two major factors contributing to the high prevalence of malnutrition in critically ill patients.	1.5	CO3
Q17	List down the various feeding routes for providing enteral nutrition.	1.5	CO3
Q18	What are the clinical manifestations of diabetic ketoacidosis (DKA)? a. Hyperglycemia, ketosis, and metabolic alkalosis b. Hypoglycemia, ketosis, and metabolic acidosis c. Hyperglycemia, ketosis, and metabolic acidosis d. Hypoglycemia, ketosis, and metabolic alkalosis	1.5	CO3
Q19	Name three screening tools used for screening children, adults and elderly population.	1.5	CO3
Q20	State one key difference between a normal diet and therapeutic adaptations. Give examples of therapeutic adaptations.	1.5	CO3
<b>Section B</b> <b>(4Qx5M=20 Marks)</b>			
Q1	a. Compare and contrast between a full fluid diet and a soft diet. (2.5 marks) b. Discuss the purpose and limitations of each diet, by providing examples of suitable foods for each. (2.5 marks)	5	CO2
Q2	Differentiate between nutrition screening and nutrition assessment.	5	CO2
Q3	a. What is prediabetes? (1.5 marks) b. Explain the underlying pathophysiology of prediabetes and discuss the importance of screening for this condition. (3.5 marks)	5	CO2
Q4	What is hypertension? Discuss the role of various factors that contribute to the development and progression of high blood pressure.	5	CO2
<b>Section C</b> <b>(2Qx15M=30 Marks)</b>			
Q1	a. Define diabetes mellitus and explain its classification based on etiology and pathophysiology. b. What are the screening and diagnostic criteria for diabetes? c. Create a comprehensive flow chart to illustrate the clinical manifestations of diabetes mellitus.	15 (5 marks × 3)	CO3
Q2	A 60-year-old patient has been receiving total parenteral nutrition (TPN) for the past two weeks following major abdominal surgery. The patient's condition has stabilized, and the medical team is considering transitioning the patient to enteral nutrition (EN) as oral intake is not yet possible. The patient's current PN regimen includes a standard mixture of macronutrients and micronutrients.  The healthcare team wants to plan the transition carefully to ensure optimal nutrition support.	15 (5 marks × 3)	CO4

	<p>a. What is transitional feeding? Outline key steps and considerations while transitioning this patient from parenteral to enteral nutrition, considering factors such as the patient's current nutritional status and gastrointestinal function.</p> <p>b. Discuss potential challenges and strategies to address them during the transition process.</p> <p>c. Describe your approach to monitor the patient's tolerance to enteral nutrition and the criteria you would use to evaluate the success of the transition.</p>		
<p><b>Section D</b> <b>(2Qx10M=20 Marks)</b></p>			
Q1	<p>a. Discuss the distinctive clinical manifestations of acute kidney injury (AKI). (5marks)</p> <p>b. Outline the sequential pathophysiological alterations observed during the progressive stages of CKD. (5 marks)</p>	10 (5 marks × 2)	CO3
Q2	<p>a. What is atherosclerosis? Elaborate on its underlying pathophysiological mechanisms.</p> <p>b. Identify and discuss the primary risk factors associated with the development of atherosclerosis.</p>	10 (5 marks × 2)	CO4