


Name:			
Enrolment No:			
UPES End Semester Examination, May 2024			
Course: Nutritional Education Program: B.Sc. (Food Nutrition & Dietetics) + Int. (B.Sc. + M.Sc. (Nutrition & Dietetics)) Course Code: HSCC2030		Semester : IV Duration : 3 Hours Max. Marks : 100	
Instructions: Read all the questions carefully.			
Section A			
S. No.	Short answer questions/ MCQ/T&F (20Qx1.5M = 30 Marks)	Marks	COs
Q1	Which of the following is an example of a nudge? a. Posting a sign that says "No Smoking" b. Placing healthy food options at eye level in a cafeteria c. Offering a discount for a gym membership d. All of the above	1.5	CO1
Q2	Which of the following is an example of a barrier to behavior change? a. Access to healthy foods b. Availability of fast-food restaurants c. Price of gym memberships d. All of the above	1.5	CO1
Q3	Which of the following is a strength of the randomized controlled trial (RCT) design? a. Allows for the identification of causal relationships. b. Requires a large sample size. c. Only requires a single data collection point. d. Cannot be affected by confounding variables.	1.5	CO1
Q4	What is the primary purpose of conducting a needs assessment? a. To evaluate program effectiveness b. To identify strengths and weaknesses c. To determine gaps between current and desired conditions d. To allocate resources efficiently	1.5	CO1
Q5	Which of the following is an example of a closed-ended question used to assess knowledge in a KAP survey? a. What are your thoughts on healthy eating habits? b. Do you know the recommended daily intake of fruits and vegetables? c. How often do you eat fast food? d. All of the above options	1.5	CO1

Q6	<p>In a survey assessing knowledge, attitudes, and practices (KAP) towards physical activity, which of the following would be the most appropriate closed-ended question to gauge practice?</p> <ol style="list-style-type: none"> "What are your thoughts on the benefits of exercise?" "Do you engage in at least 30 minutes of moderate physical activity per day?" "How do you feel about joining a gym?" "Describe your understanding of the importance of staying active." 	1.5	CO1
Q7	<p>Which of the following scenarios best exemplifies the use of choice architecture principles?</p> <ol style="list-style-type: none"> Placing fresh fruits and vegetables at the entrance of a grocery store. Offering a discount coupon for a sugary beverage at a fast-food restaurant. Displaying healthy meal options in small print at the bottom of a restaurant menu. Providing free samples of high-calorie snacks at the checkout counter of a supermarket. 	1.5	CO2
Q8	<p>You're in a hurry to catch a train and need to calculate the quickest route to the station.</p> <p>Which type of thinking - System 1 or System 2 - would you likely rely on to make this decision?</p>	1.5	CO2
Q9	<p>Which type of bias occurs when participants' ability to accurately remember past events or experiences is influenced by their knowledge of the study's objectives?</p> <ol style="list-style-type: none"> Blinding bias Selection bias Recall bias Sampling bias 	1.5	CO2
Q10	<p>Provide a difference between prospective and retrospective study designs using an example.</p>	1.5	CO2
Q11	<p>What does KAP stand for?</p> <ol style="list-style-type: none"> Knowledge, attitude, and plan Knowledge, analysis, and practice Knowledge, attitude, and practice Knowledge, aptitude, and personality 	1.5	CO2
Q12	<p>Define incidence.</p>	1.5	CO2
Q13	<p>What is decision fatigue?</p>	1.5	CO2
Q14	<p>State the components of socio-ecological model.</p>	1.5	CO2
Q15	<p>Which of the following is NOT a potential outcome of a needs assessment?</p> <ol style="list-style-type: none"> Identification of priorities Allocation of resources Program implementation Improved decision-making 	1.5	CO2

Q16	A study was conducted to determine the effectiveness of a new diet program in reducing the risk of cardiovascular disease. Participants were randomized into two groups, one group receiving the new diet program and the other group receiving a standard diet plan. The researcher then switched the participants to the alternate diet program after a set period. What type of study design was used in this case study?	1.5	CO3
Q17	In a case-control study, cases and controls are selected based on their exposure status. Which of the following is a potential problem with this study design? a. Confounding bias b. Information bias c. Selection bias d. Observer bias	1.5	CO3
Q18	Which of the following is a limitation of the cross-sectional study design? a. Cannot establish causality. b. Requires a long follow-up period. c. Is expensive to conduct. d. Is prone to selection bias.	1.5	CO3
Q19	Define ecological fallacy.	1.5	CO3
Q20	What is randomization?	1.5	CO3
Section B (4Qx5M=20 Marks)			
Q1	Outline the goals of nutrition education and elaborate their significance in enhancing overall health and preventing nutrition-related illnesses.	5	CO2
Q2	Examine the essential skills and qualities needed for effective nutrition educators to cater to the diverse needs of individuals and communities.	5	CO2
Q3	Outline three differences between cross-sectional and experimental research designs.	5	CO2
Q4	a. What do you understand by the term incentive? (2.5 marks) b. How does system 1 thinking influence your choices? (2.5 marks)	5	CO2
Section C (2Qx15M=30 Marks)			
Q1	A study was conducted in a university cafeteria to investigate the effect of priming on snack choices. The participants were randomly assigned to one of two conditions. In the first condition, a poster of a healthy food item was displayed near the snack section, while in the second condition, a poster of an unhealthy food item was displayed. The participants were then asked to choose a snack from the available options. Result showed that participants who were exposed to the healthy food poster were more likely to choose a healthier snack option than those who were exposed to the unhealthy food poster. This suggests that priming with healthy food cues can influence snack choices in a positive way. Answer the following questions.	15 (5 marks × 3)	CO3

	<ul style="list-style-type: none"> a. What are nudges? How does system 1 thinking influence food choices? b. What is priming and how does it affect food choices? c. How can nutrition scientist, restaurants or food retailers use choice architecture techniques to promote healthier food choices? 		
Q2	<p>You are designing an observational study to investigate the association between physical activity levels and the incidence of cardiovascular disease (CVD) among middle-aged adults, for a long term. Your study aims to examine this relationship without inferring causality.</p> <ul style="list-style-type: none"> a. Describe the design of the study and justification around it. b. Describe the characteristics of the population you would select for your study. What criteria would you use to define inclusion and exclusion criteria? c. Explain why it is important to select cohorts that are representative of the target population. Discuss potential challenges in recruiting and retaining participants in your study. d. Identify potential sources of bias in such studies, such as selection bias and measurement bias. e. Describe strategies to minimize bias in your study design. Consider approaches for minimizing loss to follow-up, standardizing data collection methods, and adjusting for confounding variables. 	15 (3 marks × 5)	CO4
Section D (2Qx10M=20 Marks)			
Q1	<p>A public health agency in a rural community aims to improve hand hygiene practices among residents to reduce the transmission of infectious diseases. They believe that distributing educational pamphlets containing information about the importance of handwashing with soap will increase knowledge and awareness, leading to improved hygiene practices.</p> <p>However, many residents do not have access to clean water and soap, making it challenging to adhere to recommended hand hygiene practices. Traditional beliefs and customs, lack of awareness also posed a challenge. With this additional clarity about the context, we can design a better intervention to promote infrastructure development and BCC.</p> <ul style="list-style-type: none"> a. Discuss the above behavioral intervention using Beliefs-Barriers-Context Model (BBC model). b. Provide appropriate recommendations to address the identified barriers and context. 	10 (5 marks × 2)	CO3
Q2	<p>A study was conducted to determine the effectiveness of a new pain relief medication in reducing the duration of pain in patients with chronic pain. Patients were randomized into two groups, one group receiving the new</p>	10 (5 marks × 2)	CO4

	<p>medication and the other group receiving a placebo. The study was conducted in a double-blind manner.</p> <ul style="list-style-type: none">a. What type of study design is used in this case study? Explain the rationale for using this study design.b. What is blinding? Discuss its importance in reducing bias.		
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