Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2023

Course: Nutritional Education
Program: Int. B.Sc. – M.Sc. Food Nutrition & Dietetics
Course Code: HSND2009

Semester : IV
Duration : 3 Hours
Max. Marks : 100

Instructions:

S. No.	Section A Short answer questions/ MCQ/T&F (4Qx1.5M+8Qx3M= 30 Marks)	Marks	COs
Q1	List down the pre-requisite subjects that one needs to learn to practice nutrition education in community.	1.5	CO1
Q2	Define the following terms: a. Mortality rate b. Prevalence	3	CO1
Q3	List down the tools used to conduct quantitative and qualitative surveys.	3	CO2
Q4	Write down the steps involved in program planning.	3	CO3
Q5	What do you understand by the term barriers and facilitators?	3	CO3
Q6	What are the benefits of involving community members in the development of a nutrition program?	3	CO3
Q7	What is the primary purpose of pre-testing a KAP survey? a. To determine the reliability of the survey questions b. To identify potential problems with the survey administration c. To ensure that the survey questions are relevant to the target population. d. All of the above options	1.5	CO3
Q8	Which of the following is an example of attitude in KAP? a. Understanding the importance of a balanced diet b. Shopping for fresh produce at the farmer's market c. Enjoying the taste of whole grain bread d. Being motivated to make healthy food choices	1.5	CO3
Q9	Which type of bias occurs when the researcher unintentionally introduces their own beliefs or expectations into the study? a. Blinding bias b. Confounding bias c. Recall bias d. Observer bias	1.5	CO1

Q10	A group of researchers conducted a study to examine the effectiveness of a new drug for obesity. They randomly assigned the participants into two groups: the experimental group and the control group. The experimental group received the new drug, while the control group received a placebo. The researchers followed the participants for 12 months and recorded their body fat% measurements at various intervals. Identify the study design used in this case study and explain how it is appropriate for examining the effectiveness of the new drug.	3	CO2
Q11	A researcher is interested in studying the prevalence of diabetes in a population. They recruit a group of participants and measure their blood glucose levels. The researcher then follows the participants for several years to see if they develop diabetes. Identify which research design is used in the above study and support your answer.	3	CO1
Q12	How would you communicate research findings to a lay audience versus a professional audience?	3	CO3
Section B (4Qx5M=20 Marks)			
Q1	What is a nudge in the context of food choices? Provide an example of a nudge that could encourage healthier food choices.	5	CO3
Q2	How does social influence affect food choices? Provide an example of how social norms can influence food choices in a given environment.	5	CO2
Q3	Explain the concept of blinding in a randomized controlled trial. Why is blinding important, and how can researchers implement blinding in a study?	5	CO2
Q4	How would you assess the effectiveness of a nutrition education program?	5	CO1
Section C (2Qx15M=30 Marks)			
Q1	John is a 12-year-old boy who loves watching TV. One day, he saw an advertisement for a fast-food chain that offered a free toy with a kid's meal. John begged his mother to take him to the restaurant, and she agreed. They went to the restaurant, and John ordered a burger, fries, and a soft drink. He loved the meal and the toy, and since then, he asks his mother to take him to the same restaurant every week. Answer the following questions based on the above case study: a. How can advertisements influence food choices? b. What is an obesogenic environment, and how can it affect food choices? c. What are some strategies that can be implemented to counteract the influence of food advertisements on food choices?	15 (5marks× 3)	CO1

Q2	An intervention program is planned to promote healthy eating habits among college students. As part of the program, design a KAP survey to assess students' current knowledge, attitudes, and practices related to healthy eating with 5 close ended and open-ended questions each to assess their KAP. The survey will cover topics such as dietary guidelines, food groups, and portion sizes. The open-ended questions will ask students to describe their current eating habits, their motivations for making healthy food choices, and any barriers they face in eating healthily.	15	CO3
Section D (2Qx10M=20 Marks)			
Q1	A researcher was studying the effectiveness of a new medication for high blood pressure. Participants were randomly assigned to either receive the new medication or a placebo. The researcher was responsible for measuring the participants' blood pressure before and after the intervention. However, the researcher had a strong belief that the new medication was highly effective and, consciously or unconsciously, measured the blood pressure in a way that favored the new medication group. This bias could result in inaccurate conclusions about the effectiveness of the medication. A. Identify the bias in the above research design and discuss how it can impact research outcomes. B. How can researchers address the identified bias in their studies?	10 (5marks× 2)	CO3
Q2	An intervention is planned to substantially increase the consumption of fruits and vegetables among community members over the next 6 months to reduce micronutrient deficiencies. Based on the above need, develop SMART long term and short-term objectives keeping in mind the PICO framework for the above nutrition program.	10	CO2