

Ph. D. (FOOD AND NUTRITION)
(PHDFN)

Term-End Examination

December, 2024

RFNE-004 : ADVANCE NUTRITION

Time : 3 Hours

Maximum Marks : 100

Note : Answer any *five* questions. All questions carry equal marks.

1. As a nutrition expert you have been invited to write an article on fats and oils for general public to dispel their wrong notions and provide facts on nature, requirement and choice of oils/fats in day to day life. Restrict the article to about **500** words. 20
2. What do you understand by the Factorial Estimation of Total Energy Expenditure ? Using this approach, highlighting all the components, calculate the energy expenditure of a 20-year old NPNL woman. Describe all the components briefly. 5+15

3. Several methods have been used for studying the nutrient requirements. Describe the various methods and their use in human nutrition. 20
4. Briefly describe the 'preferred test' method adopted by FAO/WHO for the measurement of the protein value in human nutrition. Present the methodology and limitations of this method. 20
5. (a) Briefly discuss the nutritional implications of dietary factors with anti-nutritional effects. 10
(b) Briefly discuss the role of chromium in carbohydrate, lipid and insulin metabolism. 10
6. (a) What is meant by gene expression ? Briefly discuss the role of specific nutrients in controlling gene expression. 10
(b) How are nutritional ergogenic aids classified/categorized ? 10

x x x x x x x