

2024

Sem - 3

Roll no.....

**Department of Food Technology**  
**School of Interdisciplinary Sciences and Technology**  
**Jamia Hamdard, New Delhi – 110062**  
**M.Sc. Nutrition and Dietetics**  
**End Term Examination, Semester- III, December, 2024**  
**Paper Title: Advance nutrition; Paper Code: MDNCC-301**

**Duration: 3 Hours****Max Marks: 60**

*Note: write to the point, please make sure you have mentioned question no. before answering*

**SECTION-A****Q. no- I. Attempt any five** from the following questions:**(2 marks each; 2X5=10marks)**

|    |                                                                                      |                   |
|----|--------------------------------------------------------------------------------------|-------------------|
| 1) | Give the classification of sports and games based on energy expenditure              | (CO-1,2,3 PO-2,3) |
| 2) | Give the three models of body composition.                                           | (CO-2,3 PO-2,3)   |
| 3) | Define acclimatization?                                                              | (CO-2,3 PO-2,3)   |
| 4) | Define HBM.                                                                          | (CO-2,3 PO-2,3)   |
| 5) | Give the names of three different types of skinfold caliper and mention its purpose. | (CO-2,3 PO-2,3)   |
| 6) | What is the triple burden of malnutrition ?.                                         | (CO-2,3 PO-2,3)   |

**SECTION-B****Q. no-II. Attempt any five** of the following questions:**(5 marks each; 5X5=25 marks)**

|    |                                                                                                                                          |                     |
|----|------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1) | Explain Bioelectrical impedance analysis (BIA) and hydrostatic weighing.                                                                 | (CO-2,3 PO-2,3)     |
| 2) | Explain the role of nutrients in sports nutrition giving examples of different categories of sports.                                     | (CO-1,2,3 PO-2,3)   |
| 3) | Describe thermoregulation in cold conditions.                                                                                            | (CO-1,2,3 PO-1,2,3) |
| 4) | What are the effects of non-competitive interactions involving organic substances in inhibiting nutrient bioavailability of plant foods. | (CO-2,3 PO-2,3)     |
| 5) | Elaborate Trans-theoretical model. What are the skill and attributes of nutrition counsellor?                                            | (CO-2,3 PO-2,3)     |
| 6) | Define bioavailability. What are the influence of processing methods on bioavailability of nutrients                                     | (CO-1 PO-2,3)       |

**SECTION-C****Q. no- III. Choose and answer any two** of the following questions:**(12.5 marks each; 12.5X2=25)**

|    |                                                                                                                    |                     |
|----|--------------------------------------------------------------------------------------------------------------------|---------------------|
| 1) | Give an overview of theories used in Nutrition education and counselling.                                          | (CO-1 PO-2,3)       |
| 2) | What are the body composition assessment methods? Explain.                                                         | (CO-2,3 PO-2,3)     |
| 3) | What are the parameters of fitness and explain the various fitness tests?.                                         | (CO-1,2,3 PO-2,3)   |
| 4) | Describe the factors influencing the changing dietary pattern. What are the strategies to improve dietary pattern. | (CO-1,2,3 PO-1,2,3) |