

**M.Sc.**

**2011**

**2nd Semester Examination**

**NUTRITION & DIETETICS**

**PAPER—NUD-203**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**Module—I**

**[ Nutrition in Health & Fitness ]**

1. Answer the following any five questions : 5×1
- (a) What is sports anaemia ?
  - (b) What is Phosphagen system ?
  - (c) What do you mean by Pregame meal ?
  - (d) Why creatine is ergogenic aid ?
  - (e) Write the full form of DHEA.
  - (f) What is metabolic water ?

*(Turn Over)*

- (g) What is anabolic steroid ?
- (h) How much protein is require for endurance athletes ?
2. (a) Discuss the importance of  $\beta$ -hydroxy- $\beta$ -methyl butyrate in performance of an athletes.
- (b) State the different role of vitamins and minerals on exercise.

4+4

Or

- (a) Describe in brief the regulators of body weight.
- (b) State why weight management is most important throught the life ?
- (c) Discuss the impact of nutrient intake on weight management.
3. (a) Write the importance of fluid requirement of athlete.
- (b) State the importance of glycogen loading on athelets.

2+3+3

 $3\frac{1}{2}+3\frac{1}{2}$ 

Or

- (a) Define performance and endurance.
- (b) State the mechanism of anabolic steroids on the improvement of physical performance.

2+5

**Module—II****[ Nutritional Anthropology ]**

4. Answer any five questions from the following : 1×5
- (a) How to calculate relative weight of an individual ?
  - (b) What do you mean by Densitometry ?
  - (c) What is Quetelet's index ?
  - (d) What do you mean by Waist-Height ratio ?
  - (e) What is stunting ?
  - (f) What do you mean by body composition ?
  - (g) Write the reference value of MUAC of under 5 children ?
  - (h) How do you determine REE by WHO's prediction equation of an adult individual ?
5. (a) State the different importance of nutritional anthropometry.
- (b) How will you determine the body density of an individual by under water weighing method with LBM ?

3+5

Or

- (a) What are the instruments used for measuring different anthropometric variables with their limitation/perfection ?

(b) How will you determine BEE by three anthropometric variables of an adult ICMR reference male/female with the help of Harris Benedict Prediction equation.

4+4

6. (a) Describe the method / technique of determination of skin fold by skinfold caliper with examples.

(b) Calculate Percentage of body fat (PBF) & Total body fat (TBF) of an female having iliac skinfold (A) & arm skinfold (B) are 20mm & 18mm respectively after computation of body density by the help of following equation  $\text{density} = 1.0764 - 0.00081A - 0.00088B$ .

3+4

Or

(a) Differentiate between two anthropometric measurements diameter & circumference with examples.

(b) Calculate 4 BW & percentage of body fat of a male subject having sum of different 8 diameter values is 14.65 as  $c/k = d$  and 'h' is body height in decimeter i.e 16.4 and body weight is 65 kg.

3+4