

M.Sc.

2015

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

1. Answer any *five* questions of the following : 1×5

- (a) What is sports anaemia ?
- (b) What do you mean by endurance ?
- (c) What is phosphagen system ?
- (d) Write the full form of DHEA and WADA.

(Turn Over)

- (e) What is Anabolic steroid?
 - (f) Why the red muscle fibres work for longer period?
 - (g) Why does anaerobic respiration produce less energy than aerobic respiration?
 - (h) How do trained individuals differ from untrained subjects?
2. (a) How does menstrual cycle influence the athletic performance in female athletes? Discuss with suitable example.
- (b) What do you mean by lactic acid system? Write the importance of lactic acid system. 4+(1+3)

Or

- (a) Discuss the basic steps of muscular contraction according to the 'Sliding Filament Theory'.
 - (b) What are the affects of aerobic and anaerobic training of muscle fibre. 4+(2+2)
3. (a) Write in brief the regulators of body weight.
- (b) State the importance of fluid requirement of an athlete. $3\frac{1}{2}+3\frac{1}{2}$

Or

- (a) State the importance of β -hydroxy β -methyl buty rate in the performance of athletes.
- (b) Write the role of different vitamins on exercise.

4+3

Module—II

4. Answer any *five* questions from the following : 1×5

- (a) What do you mean by 'relative' body weight ?
- (b) What is densitometry ?
- (c) How will you determine the wasting of a child ?
- (d) How will you determine REE by ICMR prediction equation of an adult female ?
- (e) What do you mean by Fat free man ?
- (f) What do you mean by landmarks in nutritional anthropometry ?
- (g) Write the full form of 'DEXA' and 'NIR'.
- (h) What is Extreme Somatotypes ?

5. (a) What do you mean by body composition ?
- (b) Which parameters are considered for determination of body composition ?
- (c) How will you determine the body density of an individual ? 2+3+3

Or

- (a) State the importance of different nutritional anthropometry.
- (b) What are the instruments used for measuring different anthropometric variables with their limitations ? 4+4
6. (a) State the technique for the measurement of Skinfold.
- (b) Calculate the Percentage of body fat (PBF) and Total body fat (TBF) of a female having illiac skin fold (A) and arm skinfold (B) are 25mm and 20mm respectively.

Or

- (a) Distinguish between BEE and REE.
- (b) How do you interpret the nutritional status of an under 3 years children following the measurement of head and chest circumference ?