

M.Sc.

2013

2nd Semester Examination

NUTRITION & DIETETICS

PAPER—NUD-201

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) Write the RDA for first class protein at the pre-school stage.
 - (b) What is the amount of energy requirement 100 ml of milk synthesis in 1st half of lactating period?
 - (c) Write the names of any two anti-catabolics.
 - (d) What do you mean by energy allowances?
 - (e) Why Ketosis is noted in starvation?
 - (f) Why first class protein is preferred in geriatric stage.

(Turn Over)

- (g) Write the calcium allowance requirement for lactating mother and give two important reasons.
- (h) Why zinc is supplemented in pregnant women's diet..
2. (a) Why egg is preferred as first class protein in the daily menu of pre-school children.
- (b) "Though breast milk contains very low level of iron but exclusive breast feeding did not develop infantile anaemia". Justify the statement.
- (c) "Animal calcium is preferred than plant calcium for pre-school children"—explain with proper reason.
- (d) Why colostrum increase the immunity of early neonate ?

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

Or

- (a) Describe the effect the calcium undernutrition on muscular activity and explain the under lying mechanism.
- (b) Why blood glucose is not decreased drastically in the acute stage of starvation.
- (c) Write in brief the RDA of calcium and iron in early adolescent girls with respect to adolescent boy.

$$3+3+2$$

3. (a) "Antioxidant enriched diet is provided to the aged individual"—Justify the statement.
- (b) Why soyaproducts are preferred as dietary item in case of lactating mother ?

- (c) State in brief about the requirement of energy yielding nutrients in first and second half of lactating stage. 3+2+2

Or

- (a) Write the guidelines for the supply of balanced diet for the heavy industrial workers.
- (b) Why RDA of energy is decreased in aged person with respect to adult.
- (c) State the reasons for undernutrition induced anaemia. 3+2+2

Module—II

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

- (a) What do you mean by biotransformation ?
- (b) Define pharmacogenomics.
- (c) Write the names of any two factors those increase the bioavailability of drug.
- (d) Write the full form of PEG and PEJ.
- (e) What do you mean by intermittent drip feeding ?
- (f) Define refeeding syndrome.
- (g) Write the full forms of LXR and RXR.
- (h) Write the full forms of MFOS and FOS.

5. (a) "Nutrients affect the drug absorption and transportation"—Justify the statement with specific example, explaining drug biotransformation.
- (b) "Nutrients influence the intestinal microflora" explain the statement with example.
- (c) Discuss in brief about the effect of nutrient on gene imprintation. (2+2)+2+2

Or

- (a) What do you mean by epigenetics?
- (b) State the role of nutraceutical on gene expression with special reference to inflammation management.
- (c) Write the role of any one nutrient on fast metabolism through gene regulation and describe the mechanism in brief. 2+3+3
6. (a) State the importance of health friendly microflora citing any two example in this concern.
- (b) "Medicine interfere gene expression". Justify the statement with any one example.
- (c) "Geinstein is a nutraceutical"—Explain the statement. 3+2+2

Or

- (a) Describe the steps of transitional feeding.
- (b) "Nutrient modify drug metabolism". Justify the statement.
- (c) State critically the enteral feeding. 2+3+2