

M.Sc.

2012

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) What do you mean by food reference ?
 - (b) Why Ketosis is noted in starvation ?
 - (c) Write the names of any two important minerals require for nutrition of aged person.
 - (d) What is the protein demand of an infant at 1st half.
 - (e) What do you mean by work with stress ?
 - (f) Write the meaning of "exclusive breast feeding".

- (g) What do you mean by calcium supplementation ?
- (h) Write the energy demand of a lactating mother engaged in moderate work.
2. (a) Describe the nutritional demand of agricultural worker engaged in hot climate.
- (b) State the modification of the dietary requirement of the same farmer engaged in cold climate.
- (c) Write the common causes of under nutrition in case of agricultural workers. 3+3+2

Or

- (a) State the differences between starvation and under nutrition from the view point of metabolism.
- (b) Describe the dynamic of protein metabolism during moderate level of protein under nutrition.
- (c) "Vitamin under nutrition influence energy metabolism" —Justify the statement with example. 3+2+3
3. (a) State the nutritional requirement of pre-school children.
- (b) State the factors affecting RDA in general.
- (c) Write the utility of RDA.
- (d) State the effects of micronutrients on RDA.

2+2+2+1

Or

- (a) Write the nutritional requirement of a girl of her late adolescence phase engaged in heavy work and give justification of such requirement.
- (b) "Protein and dietary fibers are important nutrients for geriatric nutrition" — Justify the statement.
- (c) Write the storage of iron in first half of infantile stage.

3+3+1

Module—II

4. Answer any *five* questions of the following : 1×5
- (a) What do you mean by bio-availability of drug?
- (b) Write the full form of 'RXR' and 'PPAR'.
- (c) What is thrifty gene?
- (d) What do you mean by pharmacodynamics?
- (e) Write the full forms of 'TPN' and 'PPN'.
- (f) Write the name of any one enzyme engaged in drug metabolism.
- (g) Why calcium is known as medicine?
- (h) What is symbiotics?
5. (a) Write in brief about any two facts focussing 'nutrient gene' interaction.
- (b) Discuss the role of folic acid on specific gene expression in connection with the management of health care.

4+4

- (c) "Tocopherol modulate gene expression for drug metabolism" — Justify the statement. 2+3+3

Or

- (a) What is refeeding syndrome ?
- (b) State the steps for the conversion of parenteral support to enteral support via oral support.
- (c) State the sample of parenteral nutritional formula for 70 kg body weight, 60 kg body weight and 50 kg body weight of adult.
- (d) State the different access of enteral feeding. 1+3+3+1
6. (a) State the different approaches by which drug can able to interfere the nutrient absorption from intestine.
- (b) "Nutrient influence the efficiency of the drug"— Justify the statement from the view point of drug bio-transformation.
- (c) Describe with any one example about the effect of drug on nutrient metabolism. 3+2+2

Or

- (a) Write the dietary sources of prebiotics.
- (b) State the mechanism of prebiotics in favour of health protection.
- (c) State the role of any one 'nutrient—gene interaction' on SNP. 2+2+3