

2012

M.Sc.

1st Semester Examination

NUTRITION & DIETETICS

PAPER—NUD-101

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

[Marks—20]

1. Answer any five questions of the following : 1×5
- (a) What is the role of xanthine oxidase in connection with nucleoprotein metabolism ?
 - (b) Write the full form of CMC.
 - (c) What is Hormone receptor ?
 - (d) Write the names of any two metal having positive effect on cellular immunity.

(Turn Over)

- (e) Write the names of any two nutrients having stimulatory effect on growth.
- (f) Write the full forms of 'CRE' and 'TSS'.
- (g) What is Cytokine?
- (h) What is acquired immunity?
2. (a) Explain the role of insulin on carbohydrate metabolism through genomic signal transduction path way.
- (b) Describe in brief about the cross-talk among PTH, thyrocatcitonin and Vit-D₃ on skeletal growth.
- (c) State the role of Vit-E as antioxidant. 3+3+2

Or

- (a) Describe the endogenous nano-particle formation in connection with fat absorption.
- (b) Explain the role of thyroxine with special reference to management of hyperlipidaemia.
- (c) State the role of first class protein on humoral immunity. 3+4+1
3. (a) "Growth hormone control the muscular growth" Justify the statement.
- (b) Describe any two constrains on growth and development of infant.
- (c) State the role of folate on haematopoietic system.

3+3+1

Or

- (a) Explain the role of gastrin and secretin on gastric juice secretion.
- (b) State the dual role of cortisol on blood glucose homeostasis.
- (c) State the role of aldosterone on sodium metabolism.

3+3+1

Module—II**[Marks—20]**

4. Answer any five questions of the following : 1×5
- (a) Write the level of TMG.
 - (b) Write the full forms of PAF and EDGF.
 - (c) What do you mean by dialysis ?
 - (d) What do you mean by 'Nephritis' ?
 - (e) What do you mean by urea clearance ?
 - (f) Write the name of satiety centre.
 - (g) What is osteogenesis ?
 - (h) What is Z. E. Syndrome ?
5. (a) What do you mean by renal dialysis ?
- (b) State the principle of haemodialysis.
 - (c) Why creatinine concentration in Plasma is considered as an important sensor for the indication of renal failure ?

- (d) Why calcification is affected in the children suffering from renal disease. 2+2+2+2

Or

- (a) What do you mean by feeding centre?
- (b) How pressure receptor and stretch receptors in our G.T. tract control the satiety?
- (c) Discuss in brief about the role of hormones on the regulation of thirst. 1+4+3

6. (a) "Activity of red muscle is more than pole muscle" — Justify the statement.
- (b) Describe the energy source in muscle at the first and second phase of long term physical work.
- (c) Discuss in brief about endurance.

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

Or

- (a) "Diabetes in an important pathophysiological state for induction of cardiovascular diseases"—Justify the statement.
- (b) State the scale between H6A_{1C} and blood glucose level.
- (c) Write in brief about the role of lipoprotein-a in cardiovascular disease 2+2+3
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