

2015

M.Sc. Part-I Examination

DIETETICS AND COMMUNITY NUTRITION MANAGEMENT

PAPER—I (Unit-1)

Full Marks : 50

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.

Answer Question No. 1 and any four from the rest.

1. Answer any five of the following : 5×2

- (a) What is vasa vasorum ?
- (b) What is CCK-PZ ?
- (c) With a suitable example define diuretics.
- (d) Mention two functions of interleukins.
- (e) What are the functions of oxytocin ?

(Turn Over)

- (f) Write the functions of Sertoli cells.
- (g) What is 'Catch-up growth'?
- (h) What do you understand by prenatal development?
2. (a) State the characteristic features of essential hypertension.
- (b) How does primary aldosteronism cause hypertension?
- (c) Explain neurogenic hypertension. 3+4+3
3. (a) Describe the histological organisation of concentric layers of GI tract from outside to inside with a suitable diagram.
- (b) Define deglutition.
- (c) Mention the location and functions of Brunner's gland and Peyer's patch. 5+1+(2+2)
4. (a) What do you mean by clonal selection theory?
- (b) Describe the kinetics of immune response, with a suitable curve.
- (c) Discuss the different types of receptors present on the surface of the T-lymphocytes. 2+3+5

5. (a) How is starch digested within mouth?
- (b) Discuss the mechanism of absorption amino acids and small peptides in the intestine with suitable diagrams.
- (c) Write briefly on Chylomicrons. 3+5+2
6. (a) Briefly describe the Juxtaglomerular apparatus? What are the functions of JG apparatus?
- (b) Mention the functions of mesangial cells.
- (c) Describe the process of glomerular filtration. (3+1)+1+5
7. (a) What are adreno-cortical hormones?
- (b) Describe the functions of glucocorticoids and mineralocorticoids in human body. 2+(6+2)
8. (a) Discuss briefly the hormonal regulation of ovulation.
- (b) Write the functions of interstitial cells of Leydig.
- (c) Differentiate between spermatogenesis and spermiogenesis. 5+3+2

9. (a) What do you mean by motor development?
- (b) Discuss in brief about the development of motor skills in children.
- (c) What is meant by cognitive development? $2+6+2$