

2017

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 androgen-binding protein?
 - (b) Write the location and functions of pineal gland.
 - (c) Mention the factors controlling cardiac output.
 - (d) What do you mean by diuretics? Give an example.
 - (e) Write the composition of pancreatic juice.

(Turn Over)

- (f) Mention the physiological functions of cholecystokinin.
- (g) What do you mean by adaptive immunity?
- (h) What are "stress hormones"?
- (i) What do you understand by motor development?
- (j) Mention the functions of isotypes of antibody.
2. (a) Describe the mechanism of absorption of proteins in the intestine.
- (b) What is chylomicron?
- (c) What is ghrelin? Write its functions. 6+2+(1+1)
3. (a) Describe the histological organisation of artery with a suitable diagram.
- (b) What is meant by hypertension? Classify it.
- (c) Discuss the neural regulation of cardiac output.
(2+2)+(1+1)+4
4. (a) Critically discuss the structural and functional differences between cortical and medullary nephrons.
- (b) What is JGA of Kidney? Write its physiological role.
(2½+2½)+(3+2)

5. (a) What do you mean by pheochromocytoma?
- (b) Describe the structure of pituitary gland.
- (c) "stress act as a precipitating cause of endocrine disorder" — Explain it. 2+4+4
6. (a) What is spermatogenesis?
- (b) Describe the different stages of spermatogenesis with suitable diagram.
- (c) Write the functions of Sertoli cells.
- (d) Define spermiogenesis. 1+5+2+2
7. (a) Write the importance of cellular barriers in innate immune regulation.
- (b) What is helper T cells? State its functions.
- (c) What do you mean by hypersensitivity? 4+4+2
8. (a) What are the critical periods of growth?
- (b) Discuss the importance of the hereditary factors in human growth.
- (c) What is "pubertal growth sprut"? 2+5+3

9. (a) What are goitrogenic substances ?
- (b) Discuss the regulation of hormone secretion by feedback process.
- (c) What are placental hormones ? 2+6+2