

2016

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 bilateral cardiac failure ?
- (b) What is orphan receptor ?
- (c) What is the role of mitochondria in diabetes ?
- (d) Write the role of carboxypeptidase in metabolism.
- (e) Write two functions of secondary lymphoid organ.

(Turn Over)

- (f) What are glucosidic linkages ?
- (g) What are diuretics ?
- (h) What is antiperistalsis ?
- (i) What is glucose memory test ?
- (j) mention the receptors present on the T-cell membrane.
2. (a) State the role of liver in Carbohydrate metabolism.
- (b) Write the mechanical functions of saliva.
- (c) What do you mean by cholagogue action ?
- (d) What is gastro-pancreatic reflex ?

5+3+1+1

3. (a) State the functions of blood pressure.
- (b) Discuss the hormonal regulation of blood pressure in human body.
- (c) Mention the role of vasomotor center in controlling blood pressure.

2+6+2

4. (a) What do you mean by hormone receptor mediated genomic and non-genomic signal transduction pathway ?
- (b) Write in brief about the role of steroid hormone receptor complex on gene expression.
- (c) State the hormonal regulation in the maintenance of pregnancy.
5. (a) Write the role of ADH in hypertonic urine formation.
- (b) What is renin-angiotensin system ?
- (c) How does kidney play an important role in the maintenance of blood pH ?
6. (a) What do you mean by reproductive growth ?
- (b) State the hormonal control of milk ejection.
- (c) 'Norepinephrine is diabetogenic hormone' — justify the statement from its mode of action.

3+4+3

4+2+4

2+4+4

7. (a) What is complement ?

(b) How complements are activated in the body ?

(c) Write the biological activities of complements ?

1+6+3

8. (a) What is meant by 'Growth', 'Development' and 'Maturation' ?

(b) What are cephalocaudal and proximodistal orientations of growth ?

(c) Write briefly on prenatal development and factors influencing it.

(1+1+1)+(1+1)+(3+2)

9. (a) Briefly write the role of intestinal carbohydrate transporter during absorption.

(b) State the mechanism of emulsification by bile during fat digestion.

(c) Write the functions of amylopectin.

5+3+2