

M.Sc. 3rd Semester Examination, 2018

CLINICAL NUTRITION AND DIETETICS

PAPER — CND-301

Full Marks : 40

Time : 2 hours

Answer Q.No.1 and any three questions from the rest

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

1. Answer any *ten* questions : 1 × 10
- (a) Define pharmacodynamics.
 - (b) What is down regulation of receptor ?
 - (c) What do you mean by drug potency ?

(Turn Over)

- (d) Briefly state different types of communication system in a food industry.
- (e) What do you mean by Plateau effect of dose response curve ?
- (f) What is the full form of MTHFR ?
- (g) What do you mean by leadership in an industry ?
- (h) What is the full form of SREBP ?
- (i) What is synergistic effect ?
- (j) Name the steps of pharmacokinetics ?
- (k) What is epigenetics ?
- (l) Write the name of any two genes involved in diabetes.
- (m) Write the name of enzyme and its source used in PCR.
- (n) What are the full forms of PPAR and RXR ?
- (o) What is mitochondrial diabetes ?

2. (a) What is bio-availability of drug ?
- (b) How bio-availability of drug influenced by nutrient ?
- (c) What are partial agonist and inverse agonist. Discuss with one example in each case. $2 + 4 + 4$
3. (a) What do you mean by drug nutrient interaction ?
- (b) "Renal clearance and fecal clearance of drug hampered by nutrient" – Discuss the statement with suitable example. $2 + (4 + 4)$
4. (a) How nutrient can influence the gene expression ?
- (b) Discuss the role of folic acid on gene expression.
- (c) What are the difference between steep DRC and Flat DRC ? $3 + 5 + 2$
5. (a) What is gene imprintation ?

(4)

(b) Write the regulators of gene imprintation.

(c) Discuss the role of diet of pregnant mother on diabetic controlling gene imprintation.

2 + 3 + 5

6. (a) Discuss the basic steps of Western blot.

(b) Why blocking is essential in Western blot ?

(c) Enumerate few application of Western blot.

5 + 2 + 3
