

M.Sc. 3rd Semester Examination, 2019

**CLINICAL NUTRITION AND DIETETICS**

PAPER – CND-301

*Full Marks : 40*

*Time : 2 hours*

Answer **all** questions

*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 *four* questions : 2 × 4

(a) What do you mean by supra additive synergistic effect of drug ?

(b) Define pharmacokinetics.

( Turn Over )

- (c) What do you mean by antagonist ? Give example.
- (d) What do you mean by drug affinity ?
- (e) Define bio-availability of drug.
- (f) What is the basic difference between nutrigenomics and nutrigenetics ?
- (g) Write the full form of RTX and PPAR.
- (h) What do you mean by metabolomics ?

2. Answer any *four* questions : 4 × 4

- (a) What is dose response curve (DRC). Write the differences between two drugs having sheet DRC and Flat DRC. 1 + 3
- (b) How grapes fruit juice interact with drug and alter its pharmacokinetic principles— Discuss. 4
- (c) What is LD50 ? Write the difference between efficacy and potency. 1 + 3

- (d) What do you mean by Therapeutic window ?  
What is biotransformation of drug. 2 + 2
- (e) Write the different model of nutrient-gene interaction. 4
- (f) Write the process of epigenetics in brief citing any one example. 4
- (g) "Nutrient status influence drug efficiency."  
–Justify. 4
- (h) How does nutrient influence bioavailability of drug – discuss with example. 4

3. Answer any *two* questions : 8 × 2

- (a) Discuss different pharmacokinetic principle of drug. What is first-pass effect ? 6 + 2
- (b) How drug interact with the nutrient at the site of absorption and transportation. 5 + 3
- (c) Discuss the role of Vitamin A and  $\omega$ -3 fatty acid on obesity management by gene expression. 8

- (d) How does nutritional modification induce better activity of drug ? How do you supplement Vitamin D tablets with food ? 6 + 2
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