

2018

M.Sc. 1st Seme. Examination

CLINICAL NUTRITION & DIETETICS

PAPER—CND-103

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full 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 : 4×2
- (a) Write any two examples of polyphenols.
 - (b) What is the nature of lycopene ?
 - (c) Define nutraceuticals.
 - (d) What is fortified food ?
 - (e) Write any two health beneficial effect of curcumin.

(Turn Over)

- (f) Write the size of nanoparticle.
- (g) What is nanodietotherapeutics ?
- (h) Write any two examples of GM food.

2. Answer any four questions :

4×4

- (a) (i) What are Phytoestrogens ?
- (ii) State the health beneficial effect of Phytoestrogen.
- $1\frac{1}{2} + 2\frac{1}{2}$
- (b) (i) Write the fundamental principle for iron fortified golden rice production through genetic engineering.
- (ii) What are the demerits of GM food ? 3+1
- (c) (i) Write any two applications of nanotechnology in food science.
- (ii) State the application of nanotechnology in sports supplement. 3+1
- (d) (i) State the antioxidative role of lycopene.
- (ii) Clarify polyphenols. 2+2

- (e) (i) What is protease inhibitor type of nutraceuticals ?
(ii) State the role of protease inhibitor in human. 2+2
- (f) (i) State the beneficial role of vit-A enriched transgenic rice over vit-A supplementation for recovery of vit-A deficiency.
(ii) Write the health beneficial role of saponins. 3+1
- (g) (i) What are the different techniques used in the development of nano nutrients ?
(ii) How bioavailability of nutrients is increased by nanotechnology ? 2+2
- (h) (i) Write the process of nanoparticle encapsulation.
(ii) Write the full form of SEM & TEM. 2+2

3. Answer any two questions : 2×8

- (a) (i) State the process of gene transfer in transgenic plant development with example.
(ii) Write the merit of G.M. food. 5+3

- (b) (i) State the precautions to be adopted for handling and cooking of 'Iodine' fortified table salt for proper deliveration of this element to consumer.
- (ii) Write a short note on ethics of GM food.
- (iii) Describe briefly the current senario on GM food.
- 3+3+2
- (c) (i) What do you mean by double fortification of common salt ?
- (ii) Write the precautions should be followed for better efficacy of iodized table salt.
- (iii) Why fortified food is an important tool for disease prevention and recovery in our country ?
- 2+3+3
- (d) (i) Write a briefly on Phytosterol.
- (ii) State the merits and demerits of Phytosterol.
- 4+4
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