

M.Sc. 1st Semester Examination, 2023

CLINICAL NUTRITION & DIETETICS

PAPER—CND-103

Full Marks : 50

Time : 2 hours

The figures in the right hand margin indicate marks

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

GROUP — A

Answer any four questions of the following :

2 × 4

1. Name two foods that contain nanoscale molecule and nanofilaments.
2. Differentiate nutraceuticals and pharmaceuticals.

(Turn Over)

3. Name four anti-inflammatory phytochemicals.
4. What do you mean by synergistic action of nutraceuticals?
5. Write the mode of action of antioxidants for ROS management.
6. What do you mean by encapsulation efficiency?

GROUP – B

Answer any four questions : 4 × 4

7. State briefly about nanoniosome and nanoliposome.
8. How are solid lipid nanoparticles and nanostructured lipid carriers formed – state diagrammatically along with its utility.
9. Discuss about endogenous and exogenous sources of prebiotics.

10. Write about the antioxidative and anti-inflammatory roles of lycopene.
11. What do you mean by amylase inhibitor? State the role of phyto molecule as amylase inhibitor for the management of diabetes. 1 + 3
12. Write the nature of 'Resveratrol'. State the health beneficial effect of Resveratrol focusing any one effect. 1 + 3

GROUP – C

Answer any two questions : 8 × 2

13. How do you develop chitosan encapsulated curcumin nanoparticle? Briefly discuss the role of this nano formulation against female reproductive toxicity. 4 + 4
14. Discuss about the mechanism of action of probiotics in the maintenance of gut health. Give a brief outline of extraction technology of *phytomolecules from medicinal plant*. 4 + 4

15. Write the sources of DADS. Discuss the therapeutic role of DADS for cancer management. 2 + 6
16. State the nature of phytoestrogen. Write the role of phytoestrogen for the management of Osteoporosis. 2 + 6

[Internal Assessment — 10 Marks]
