

2025

M.Sc. 1st Semester Examination
CLINICAL NUTRITION AND DIETETICS

Paper : CNDC405X1

**(Nutraceuticals and Application of
Nanotechnology)**

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *two* questions : 2×2=4

1. Define GM Foods.
2. What is meant by bioavailability of nutraceuticals?
3. What is nanoencapsulation?
4. Mention one adverse effect and one beneficial (functional) role of phytates.

Group - B

Answer any *two* questions : 4×2=8

5. Briefly explain the role of nutraceuticals in reducing the risk of cardiovascular disease or diabetes.

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(2)

6. Illustrate your concept on nanoniosome and nanoliposome with the help of diagrammatic representation.
7. Classify polyphenols and explain the health effects of flavonoids. 2+2
8. Explain the nutritional roles of plant pigments with special reference to lycopene. What is Golden Rice? 2+2

Group - C

Answer any *one* question : 8×1=8

9. Describe polyphenols as bioactive plant compounds. Discuss the dual role such as antinutritional and functional significance of protease inhibitors, amylase inhibitors, and haemagglutinins mentioning their sources. 2+6
10. Define green synthesis of nanonutraceuticals. How do you increase the bioavailability of curcumin by the application of nanotechnology? 2+6

Internal Assessment : 5 marks
