

M. Sc. 4th Semester Examination, 2025

CLINICAL NUTRITION AND DIETETICS

PAPER — CND-404

Full Marks : 50

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

GROUP—A

Answer any four questions :

2 × 4

- 1. What do you mean by quality food ?**
- 2. What is meant by 'Farm to fork' concept ?**
- 3. Differentiate toxin and toxicants.**

(Turn Over)

(2)

4. Define biofortification.
5. Justify the need for integration of food laws.
6. Name to mushroom toxins.

GROUP – B

Answer any **four** questions : 4 × 4

7. How do you calculate safety based therapeutic index (TI_{safety}) and efficacy based therapeutic index (TI_{efficacy})? How does in vivo experiment differ from exvivo experiment? 2 + 2
8. Discuss about food fortification and food enrichment. 4
9. State the sources of aflatoxin poisoning along with its mechanism of action on human body with special reference to its cancer promoting process. 4
10. Illustrate your idea about the objectives of food safety and standards Act 2006. 4

(3)

11. Differentiate pasteurization and sterilization.
What are the symptoms of shigellosis and shellfish toxicity? 2 + 2
12. Discuss about the merits and demerits of GM food. 4

GROUP - C

Answer any two questions : 8 × 2

13. Describe internal failure cost, and external failure cost in a food industry. How do food handlers very often contaminate food and what types of hygienic practices should be employed to avoid contamination? 4 + (2 + 2)
14. Define prostration. Write about the safe temperature zone of food preservation with a schematic diagram. "Sea foods in tourist spots are very often responsible for food poisoning" - justify the statement. 2 + 2 + 4

(4)

15. Write short notes : 3 + 3 + 2

(a) Codex Alimentarius

(b) Consumer protection act

(c) Muscarine poisoning

16. What do you mean by 'phase 0' clinical trial? How do you identify 'critical control point' while executing HACCP? Describe briefly about the core pillars of Food Safety Management System (FSMS). 2 + 2 + 4

[Internal Assessment – 10 Marks]
