24UNDET5A01

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai - $600\ 044$.

B.Sc.CND - END SEMESTER EXAMINATIONS - NOV'2024 SEMESTER -V

24UNDET5A01-Functional Foods and Nutraceuticals

Total Duration: 2 Hrs.30 Mins. Total Marks: 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. Explain the concept of FOSHU and interpret the regulatory issues surrounding Functional Foods and Nutraceuticals.
- 2. Explain the role of functional foods derived from animal milk in promoting bone health.
- 3. Relate the roles of prebiotics and probiotics in maintaining a healthy gut microbiome.
- 4. Illustrate the connection between nutrition supplementation and gene expression.
- 5. Explain how the specific nutraceutical properties of Cruciferous vegetables and Cinnamon can be applied to reduce oxidative damage in the body.
- 6. Prepare a dietary plan incorporating animal milk, eggs, fish, and meat, aimed at enhancing the intake of functional nutrients. Predict the potential long-term health outcomes of following this plan.
- 7. Explain the rationale for using symbiotics over individual prebiotics or probiotics in therapeutic applications.
- 8. Differentiate between nutrigenomics and nutrigenetics in terms of their focus and applications.

Section C

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. Classify the different types of Phytochemicals and relate them to their respective sources and health benefits.
- 10. Apply nutraceutical principles to explain how bioactive compounds in Garlic and Turmeric can be used to create functional foods that reduce cardiovascular disease risk.

Contd...

- 11. Ascertain the health benefits associated with the consumption of omega-3 and omega-6 fatty acids found in fish, and justify their role in reducing cardiovascular diseases.
- 12. Classify various functional foods that contain prebiotics, probiotics, or synbiotics.
- 13. Appraise the impact of recent trends in Nutrigenomics on personalized nutrition strategies.
