

Roll.No.

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 - NOVEMBER 2025  
SEMESTER - V

**24UNDET5A01 - Functional Foods and Nutraceuticals**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

### Section B

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

1. Give examples of phytochemicals found in common vegetables and fruits.
2. Illustrate how DHA and EPA in fish influence brain and eye development
3. Show how synbiotics combine the effects of prebiotics and probiotics in functional foods.
4. Describe recent trends in nutrigenomics research and applications.
5. Explain how cinnamon influences insulin sensitivity.
6. Predict the effects of regular lean meat intake on muscle health.
7. Explain the differences between prebiotics, probiotics, and synbiotics.
8. Infer how deficiencies or excesses of nutrients can alter gene expression related to disease pathways.

### Section C

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

9. Categorise functional foods based on their health benefits.
10. Classify cruciferous vegetables based on their bioactive compounds and associated health benefits.
11. Differentiate between red and white meat in terms of nutraceutical properties.
12. Present the types of prebiotics and provide examples of foods in which they are found.
13. Compare nutrigenomics and nutrigenetics in terms of scope and applications.

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