

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

BSc DEGREE EXAMINATION DECEMBER 2025
(Fifth Semester)

Branch - NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

MAJOR ELECTIVE COURSE – I : FOOD PRODUCT DEVELOPMENT & PACKAGING

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks.

$$(10 \times 1 = 10)$$

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 11.a. | Explain the stages of product development life cycle with examples. (OR) | K3 | CO1 |
| | 11.b. | Discuss factors affecting food product development and reasons for product failure or success. | | |
| 2 | 12.a. | Explain Hazard Analysis and Critical Control Points (HACCP) in product development management. (OR) | K3 | CO2 |
| | 12.b. | Describe the packaging and marketing process in food products. | | |
| 3 | 13.a. | Describe the steps involved in the product launch and evaluation. (OR) | K3 | CO3 |
| | 13.b. | Explain the role of marketing strategy in new food product commercialization. | | |
| 4 | 14.a. | Explain the uses of aluminum foil and paper in flexible food packaging. (OR) | K3 | CO4 |
| | 14.b. | Describe problems encountered in food packaging and possible solutions. | | |
| 5 | 15.a. | Describe the uses of glass containers and cans in food packaging. (OR) | K3 | CO5 |
| | 15.b. | Explain the environmental impacts of food packaging and ways to mitigate them. | | |

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|---|---------|-----|
| 1 | 16 | Explain the principles of food product development and describe the commercial stage challenges with examples. | K5 | CO1 |
| 2 | 17 | Discuss the importance of nutritional labeling in consumer decision-making and regulatory compliance, providing examples of how misleading labels can affect marketability. | K5 | CO2 |
| 3 | 18 | Analyze the importance of patenting in the food industry and its impact on innovation and competition. | K5 | CO3 |
| 4 | 19 | Evaluate the advantages and limitations of flexible packaging materials for perishable food products. | K4 | CO4 |
| 5 | 20 | Critically assess recent trends like edible packaging, active packaging, and RFID in enhancing food safety and sustainability. | K4 | CO5 |