

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025
(Sixth Semester)

Branch – NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

FUNCTIONAL FOODS & NUTRACEUTICALS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Identify the functional food for cardiovascular health
(i) Omega 3 fatty acids (ii) Artificial sweeteners
(iii) Saturated fats (iv) Trans fats
- 2 Choose the type of dietary fibre that helps in reducing cholesterol level
(i) Soluble fibre (ii) Insoluble fibre
(iii) Starch (iv) Protein based fibres
- 3 Lycopene is particularly effective in reducing the risk of which type of cancer?
(i) Lung cancer (ii) Prostate cancer
(iii) Skin cancer (iv) Colon cancer
- 4 Diosgenin is a steroidal saponin primarily found in _____
(i) Sweet potatoes (ii) Turmeric
(iii) Spinach (iv) Wild yams
- 5 Which of the following is a probiotic strain recommended by ICMR ?
(i) Escherichia coli (ii) Lactobacillus acidophilus
(iii) Staphylococcus aureus (iv) Bacillus subtilis

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Explain the benefits of Nutraceuticals.
OR
b Describe the non-essential nutrients as dietary supplements.
- 7 a Summarize the role of Resistant starch in the application of food.
OR
b Explain the quality assurance of probiotics and its safety.
- 8 a Outline the importance of tannins and glycosinolates in food product.
OR
b Bring out the effects of antinutritional factors in food processing.
- 9 a Analyze the properties amylase inhibitors.
OR
b Explain the functions and properties of diosgenin.
- 10 a Describe the ICMR guidelines for probiotics.
OR
b Summarize on national regulatory aspects of functional foods.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Classify and explain the properties of functional foods.
OR
b Elucidate the role of nutraceuticals in health and disease management.
- 12 a Define probiotics and highlights the important features of Lactobacillus and Bifidobacterium.
OR
b Discuss the applications of prebiotics in the prevention of diseases.
- 13 a Examine the application of flavonoids and isoflavones in food industry.
OR
b Discuss on food product with carotenoids and lycopene.
- 14 a Analyze the properties and functions of protease inhibitors.
OR
b Elucidate on active bio-dynamic principles of capsaicin and gingerol.
- 15 a Highlight the International regulatory aspects of functional foods.
OR
b Examine the consumer marketing issues for nutraceuticals and functional foods.

Z-Z-Z

END