

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2025
(Sixth Semester)

Branch - FOOD PROCESSING TECHNOLOGY

MAJOR ELECTIVE COURSE- II: FOOD BIOTECHNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 What is RNA?
(i) Ribo Nucleic Acid (ii) Ribosome Nucleic Acid
(iii) Ribo Nucleic Amino Acid (iv) Ribosome Nucleic Amino Acid
- 2 What is the purpose of gene cloning
(i) To study gene expression
(ii) To produce recombinant proteins
(iii) To introduce desirable traits into organism
(iv) All the above
- 3 Select the primary function of protease
(i) To synthesis protein (ii) To regulate gene expression
(iii) To degrade protein (iv) To transport molecules
- 4 What is the primary source for High fructose corn syrup production?
(i) Sugarcane (ii) Soyabean
(iii) Molasses (iv) Corn starch
- 5 Expand GOS
(i) Galacto Oligosaccharide (ii) Gluco Oligosaccharide
(iii) Glyco Oligosaccharide (iv) Glycogen Oligosaccharide

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Discuss the scope of food biotechnology.
OR
b Draw the structure of RNA.
- 7 a What are the steps in gene cloning?
OR
b Brief on T4 plasmids role in gene cloning.
- 8 a Give a short note on immobilized enzymes.
OR
b Write the microbial production of lipase.

Cont...

- 9 a List the applications of single cell proteins.
OR
b Write a short note on plant tissue culture techniques.
- 10 a Write a detailed note on the concept of nanotechnology.
OR
b What are nano composites? Specify the in future prospects.

SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Explain the functions of DNA and RNA.
OR
b Discuss the applications of biotechnology.
- 12 a Describe on the applications of gene cloning.
OR
b Give a note on recombinant of DNA technology.
- 13 a List the applications of immobilized enzymes.
OR
b Explain the function uses of microbial enzyme in food industry.
- 14 a Write the production process of High Fructose Corn Syrup.
OR
b Discuss the importance & scope of plant tissue culture.
- 15 a Explain the application of nano technology in food industry.
OR
b Illustrate on the production of amino acids.

Z-Z-Z

END