

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2022
(Sixth Semester)

Branch – FOOD PROCESSING TECHNOLOGY

FOOD BIOTECHNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- 1 Which of the following produces citric acid?
(i) Aspergillus (ii) Pseudomonas
(iii) Saccharomyces (iv) Clostridium
- 2 The DNA fragments have sticky ends due to
(i) Endonuclease (ii) Unpaired bases
(iii) Calcium ions (iv) Free methylation
- 3 The human genome project was launched in the year
(i) 1980 (ii) 1973 (iii) 1990 (iv) 1989
- 4 The vaccines prepared through recombinant DNA technology are
(i) Third generation vaccines (ii) First-generation vaccines
(iii) Second-generation vaccines (iv) None
- 5 The first transgenic plant to be produced is
(i) Brinjal (ii) Tobacco (iii) Rice (iv) Cotton
- 6 What compound that is produced by lactobacillus required for the production of yoghurt, sauerkraut, and sour dough
(i) lactic acid (ii) Carbon di oxide (iii) Yeast (iv) Flour
- 7 Enzyme used to coagulate milk during cheese making is
(i) Chymosin (ii) Rennet (iii) Trypsin (iv) Amylase
- 8 Which of the following microorganism is used in alcoholic fermentation?
(i) Pseudomonas (ii) Aspergillus
(iii) Sachromyces (iv) Pencillium
- 9 The production of bio ethanol is by fermenting the _____ and starch components.
(i) Acid (ii) Milk (iii) Sugar (iv) Alcohol
- 10 The percentage of carbondioxide in the bio methane is _____
(i) 30-40 (ii) 32-43 (iii) 35-45 (iv) 55-60

Cont...

SECTION - B (35 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

- 11 a Show the scope and importance of biotechnology.
OR
b Produce the functions DNA.
- 12 a Outline the steps involved in gene cloning.
OR
b Explain the Application of r-DNA technology in Food Production & Processing.
- 13 a Bringout the importance of single cell protein.
OR
b Enzyme is used as a biocatalyst in food industry- justify.
- 14 a Produce the applications of biotechnology.
OR
b Enumerate the production of GM rice.
- 15 a Show the formation of bio-films and its purpose.
OR
b Outline the use of nanotechnology in food industry.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Enzymatic hydrolysis of protein is important for fabrication of different foods-Justify it.
- 17 Highlight the uses of restriction endonuclease.
- 18 Outline the production of amylase and protease.
- 19 Elucidate the preparation of fermented sausage of transgenic fish.
- 20 Enumerate the industrial production of bio-ethanol.

Z-Z-Z

END