

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – FOOD PROCESSING TECHNOLOGY

FOOD MICROBIOLOGY AND FERMENTATION TECHNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The most spoilage bacteria grows at _____.
(i) Acidic pH (ii) Neutral pH
(iii) Alkaline pH (iv) All of the above
- 2 *Rhizopus stolonifer* is also called as
(i) Dairy mold (ii) Grain mold
(iii) Bread Mold (iv) Meat Mold
- 3 Listeriosis is caused by
(i) Hepatitis A virus (ii) *L.montocytogens*
(iii) Norovirus (iv) *E.coli*
- 4 Which of the following method can be used to determine the number of bacteria quantitatively?
(i) Streak-plate (ii) Pour plate
(iii) Spread-plate (iv) Spread and pour plate
- 5 Which of the following is a downstream process?
(i) Screening (ii) Media formulation
(iii) Product recovery (iv) Sterlization

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Narrate the type of reproduction noticed in yeasts and bacteria
OR
b Tabulate any five the industrially important microorganisms and their applications
- 7 a Outline the foods on the basis of their stability
OR
b Report on the types of food spoilage.
- 8 a Give the list of microorganisms that cause food borne illness
OR
b Explain the symptoms and control measures in food borne illness caused by shigellaspp.

Cont...

- 9 a Write a note on the nutritional significance of fermentation.
OR
b Outline the composition of media used for bacterial growth studies.
- 10 a Explain any one rapid method of detecting microbes.
OR
b Enlist the basic criteria followed for selection of bioreactors.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Discuss in detail the extrinsic factors influencing the survival of microorganisms.
OR
b Highlight on the different bacterial groups with their characteristics.
- 12 a Elaborate on the sources of food contamination.
OR
b Give an account on spoilage of milk.
- 13 a Differentiate endotoxin and exotoxin.
OR
b Explain in detail the cause, symptoms and treatment for gastroenteritis caused due to *Clostridium perfringens*.
14. a Discuss in detail the types of fermentation.
OR
b Describe the concept and importance of Thermal inactivation of microbes.
- 15 a Give an account on the down streaming process.
OR
b Distinguish submerged culture and solid substrate fermentor.

Z-Z-Z

END