

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2022  
(Third Semester)

Branch – FOOD PROCESSING TECHNOLOGY

FOOD MICROBIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Point out the percentage of protein content in yeast cells?  
(i) 40-50 (ii) 10-20  
(iii) 30 (iv) 45
- 2 Identify the microorganisms that is associated with wine.  
(i) *Lacto bacillus* (ii) *leuconostoc*  
(iii) Both (i) & (ii) (iv) *Salmonella*
- 3 The major cause for food spoilage is  
(i) lack of processing (ii) packaging defect  
(iii) lack or gain of moisture (iv) reaction with CO<sub>2</sub>
- 4 Which microbe serves as a indicator for fecal contamination in water?  
(i) *Clostridium* (ii) *E.coli*  
(iii) *Salmonella spp.* (iv) *Streptococcus*
- 5 Aflatoxin is produced by  
(i) *Aspergillus spp* (ii) *Acetobacter spp*  
(iii) *E.coli* (iv) *Clostridium*

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Illustrate the structure of yeast with a neat labeled diagram.  
OR  
b Sketch out the 8 beneficial microbial genera with its applications in food industry.
- 7 a Explain factors influencing food spoilage and its principles.  
OR  
b Recall the effect of microorganism in food proteins and fats.
- 8 a Give the microbiological assay of water.  
OR  
b Infer on the types of water.
- 9 a Elucidate the various medium used in microbiological examination of foods.  
OR  
b Explain the immunological method to detect microbes present in foods.
- 10 a Sketch out the types of food borne illness.  
OR  
b Discuss the symptoms and Foods involved in Botulism.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Explain the morphology, growth and reproduction of Bacteria.  
OR  
b Elaborate on the factors influencing microbial growth in foods.
- 12 a Illustrate the contamination and spoilage of milk and its products with its preventive measures.  
OR  
b Elucidate on the contamination & spoilage of egg and poultry with a preventive measures.
- 13 a Give the steps involved in the processing of bottled drinking water with a flowchart.  
OR  
b Discuss the standards for drinking packaged /bottled water .
- 14 a Enumerate the microbial standards and limits for cereals and pulses & it's by products.  
OR  
b Sketch out the thermal inactivation of microbes in detail.
- 15 a Discuss about the food borne diseases caused by the *Bacillus spp* along with its symptoms and prevention.  
OR  
b Explain the effect of *Salmonella spp.* & *E.coli* in human health with its prevention.

Z-Z-Z

END