

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025
(Fifth Semester)

Branch –NUTRITION, FOOD SERVICE MANAGEMENT AND DIETETICS

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 Choose the optimum a_w of *Penicillium sp.*
(i) 0.99 (ii) 0.97-0.99
(iii) 0.98 (iv) 0.92
- 2 What is termed to mycelium in molds?
(i) Whole mass of hyphae (ii) Whole mass of sclerotia
(iii) Whole mass of sterigma (iv) Whole mass of phialide
- 3 Pick out the microbes which causes surface slime in meat.
(i) *Pseudomonas* (ii) *Moraxella*
(iii) *Bacillus* (iv) All the above
- 4 Find the food borne disease caused by *Shigella sonnei*.
(i) Scarlet Fever (ii) Dysentery
(iii) Vomitting (iv) Dizziness
- 5 Identify the acronym of BOD.
(i) Biological Oxygen Demand (ii) Biochemical Oxygen Demand
(iii) Biotic Oxygen Demand (iv) Biological Oxygen Dilution

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Interpret the various modes of nutrition for Microorganisms.
OR
b Justify the food as a substrate for Microbial Growth.
- 7 a Explain the Physiological Characteristics of Mold.
OR
b Classify algae.
- 8 a Examine the factors affecting the growth of microbes in foods.
OR
b Illustrate the contamination of Eggs.

Cont...

- 9 a Write a short note on *Amoebiasis*.
OR
b Infer on *Mucor* food poisoning.
- 10 a Identify the characteristics of anti-microbial chemical agent.
OR
b Discuss on Composition of Sewage.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

(One Question from each unit)

- 11 a Write a detailed note on Virus with its morphology, classification and replication.
OR
b Illustrate the morphology, classification and growth curve of Bacteria
- 12 a Elucidate the role of molds in food industry.
OR
b Infer on Economic importance of Yeast.
- 13 a Assess on Contamination and Spoilage of Poultry.
OR
b Criticize on Contamination and Spoilage of Cereal and its Products.
- 14 a Infer the causes, signs, symptoms and prevention of *Anisakiasis*.
OR
b Analyze on the Food borne infections caused by *Staphylococcus* and *Salmonella*.
- 15 a Discuss on physical agents involved controlling microbial growth.
OR
b Evaluate on the steps involved in purification of municipal water supplies.

Z-Z-Z

END