

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(Fifth Semester)

Branch – MICROBIOLOGY

FOOD MICROBIOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 Choose the closely related to Water activity (aw).
(i) Relative humidity (ii) Moisture
(iii) Water content (iv) humidity
- 2 What are the intrinsic factors for the microbial growth?
(i) pH (ii) moisture
(iii) Oxidation-Reduction potential (iv) all of these
- 3 Find the low acid foods.
(i) Pears (ii) Lima beans
(iii) Pumpkin (iv) Sauerkraut
- 4 Define canning .
(i) Preservation of food in refrigerator
(ii) Preservation food with salt and spicy
(iii) Preservation of food in sealed container
(iv) Preservation of food with chemical preservatives
- 5 Which of the following is a homofermentative lactic acid bacterium?
(i) *Lactobacillus brevis* (ii) *Lueconostoc mesenteroids*
(iii) *Lactobacillus fermentum* (iv) *Lactobacillus delbruckii*
- 6 Find the originated country of sauerkraut.
(i) Germany (ii) Engalnd
(iii) America (iv) Japan
- 7 Mention the inactivation method of type-B *Clostridium botulinum* toxin.
(i) Heat 5-6 minutes at 80C (ii) Heat 15 minutes at 90 C
(iii) Dry on sunlight (iv) Heat 20 minutes 100 C
- 8 Identify the isolation sources of aflatoxin.
(i) Peanut meal (ii) Raw fish
(iii) spoiled vegetables (iv) dairy foods
- 9 Mention the Effective germicide.
(i) Chlorine (ii) Phenol
(iii) Carbon dioxide (iv) butane
- 10 Identify the explanation of GMPs.
(i) Genetically modified products (ii) Good manufacturing product
(iii) Good maintaining practices (iv) Good manufacturing practices

Cont...

SECTION - B (35 Marks)

Answer **ALL** Questions

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

- 11 a Summarize the Factors affecting μ_w requirements of microorganisms.
OR
b Describe the oxidation-reduction potential.
- 12 a List out the methods of food preservation.
OR
b Summarise the Canning procedure.
- 13 a Discuss the defects and spoilage of sauerkraut.
OR
b What are the molds that grow on cheese and explain them?
- 14 a List out the objectives of the investigation of food poisoning out breaks.
OR
b List out the foods are involved in causing out breaks of salmonella infections.
- 15 a comment on sanitizing process.
OR
b List out the types of food wastes.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Explain the classification and identification of Molds. Outline the industrial importance molds.
- 17 Discuss in detail about Pasteurization.
- 18 Outline some oriental fermentation foods.
- 19 Point out the necessary condition for an outbreak of botulism and prevention of Botulism.
- 20 Explain the some food control agencies and their role.

Z-Z-Z

END