

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION MAY 2022
(Second Semester)

Branch – ZOOLOGY

MICROBIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. Which instrument is used with microscope for picking up a single colony from a mixed population?
a) Colony counter b) Micromanipulator
c) Photometer d) Colorimeter
2. What is the chief source of spoilage of poultry meat?
a) Bacteria b) Virus
c) Fungi d) Parasite
3. Choose the causative organism of Influenza.
a) Morbillivirus b) Orthomyxovirus
c) Herpes virus d) Paramyxovirus
4. Who discovered the lactic acid from sour milk?
a) Adams b) Webmner
c) Scheele d) Currie
5. Name the most important bacilli reported to kill a wide range of insects.
a) *Bacillus thuringiensis* b) *Bacillus licheniformis*
c) *Pseudomonas aeruginosa* d) *Pseudomonas cepacia*

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a) State the present status of microbiology in India.
(OR)
b) Analyse the physical conditions for microbial growth.
7. a) Justify the preparation of Yoghurt.
(OR)
b) Evaluate the factors influencing the rate of fish spoilage.
8. a) Explain the pathogenesis of Meningitis.
(OR)
b) Illustrate the symptoms of Rabies.
9. a) Discuss the Ethanol production from molasses.
(OR)
b) Assume the applications of microbial enzymes.
10. a) Explain the significance of biofertilizers.
(OR)
b) Discuss the role of oxidation ponds in large scale sewage treatment.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a Classify the different forms of microbial cells arrangement.
OR
b Justify the process of folding and super coiling of bacterial chromosomes.
- 12 a Elucidate the microbiology of cheese.
OR
b Analyse the spoilage of meat under aerobic conditions.
- 13 a Assess the symptoms, diagnosis and control measures of typhoid fever.
OR
b Interpret the mode of transmission, diagnosis and treatment of Gonorrhoea.
- 14 a Enumerate the steps involved in quick process of vinegar production.
OR
b Predict the process of Immobilization of enzymes.
- 15 a Analyse the role of Nif gene in agriculture.
OR
b Differentiate the Enzymatic and Non-enzymatic process of microbial degradation of pesticides.

Z-Z-Z

END