

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2022
(Fourth Semester)

Branch – ZOOLOGY

MICROBIOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- 1 Which of the following scientist tried to disprove spontaneous generation theory by using simple goose necked flasks?
(i) Franz Schulze (ii) H. Schroder
(iii) Louis Pasteur (iv) Theodor schwann
- 2 Cord factor is a
(i) Protein (ii) Teichoic acid derivative
(iii) Mycolic acid derivative (iv) Carbohydrate
- 3 Bacteria reproduce asexually by
(i) Conjugation (ii) Amitosis
(iii) Meiosis (iv) Transformation
- 4 The uptake of DNA fragments from surroundings by a bacterium is termed as
(i) Transformation (ii) Conjugation
(iii) Recombination (iv) Transduction
- 5 Which of the following apparatus is used to provide steam under regulated pressure?
(i) Autoclave (ii) Laminar air flow
(iii) Incubator (iv) Hot oven
- 6 Nutrient agar medium is used for culture of
(i) Fungi (ii) Bacteria
(iii) Protozoa (iv) Virus
- 7 In which of the following phage prophage exists as a circular form?
(i) Phage P1 type (ii) Phage lambda type
(iii) Phage T2 type (iv) Phage T1 type
- 8 The protein integrase is encoded by which of the following gene?
(i) Gal gene (ii) Lambda gene
(iii) Bio gene (iv) Cro gene
- 9 AIDS Day is
(i) May 1 (ii) December 1
(iii) December 20 (iv) June 1
- 10 Diphtheria is caused by
(i) Cyanobacteria (ii) Staphylococcus
(iii) Streptococcus (iv) Clostrium

Cont...

SECTION - B (35 Marks)

Answer ALL Questions

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

- 11 a With neat diagram explain the structure and functions of bacterial cell wall.
OR
b Describe the history of microbiology.
- 12 a Explain the significance of Mycoplasma.
OR
b Draw a typical bacterial spore formation.
- 13 a Write a short notes on dry heat sterilization.
OR
b Explain the pour plate method.
- 14 a Write a short note on T4 bacteriophage.
OR
b Explain about the Interferon.
- 15 a Explain the causative agent of Measles, its symptoms and control measures.
OR
b Describe the Chicken pox.

SECTION - C (30 Marks)

Answer any THREE Questions

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

- 16 Describe the Pili and flagella.
- 17 Explain about batch and continuous culture of bacteria.
- 18 Write an essay or Gram staining.
- 19 Write a detailed note on lytic cycle in bacteriophage.
- 20 Describe the AIDS.

Z-Z-Z

END