

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2023  
(Fourth 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 \_\_\_\_\_ introduced vaccination for the prevention of small pox through inoculation of cow pox virus.  
(i) Antani Van Leeuwenhoek (ii) Edward Jenner  
(iii) Louis pasteur (iv) Robert Koch.
- 2 The E.coli lives in the \_\_\_\_\_ of bacterium.  
(i) Skin (ii) Hair  
(iii) Nail (iv) Colon.
- 3 \_\_\_\_\_ is the destruction and removal of living microorganism  
(i) Incubation (ii) Inoculation  
(iii) Sterilization (iv) Culture medium
- 4 Which one of the following is an intermediate between living and non living things?  
(i) Bacteria (ii) Virus  
(iii) Fungi (iv) Protozoa.
- 5 \_\_\_\_\_ is the causative agent of typhoid fever in man.  
(i) Vobrio cholerae (ii) Corynybactreium diphtheriae  
(iii) shigellae dysenteriae (iv) Salmonella typhi.

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a) Analyze the contribution of Alexander Fleming in microbiology.  
OR  
b) Briefly explain the types of flagellation in bacteria.
- 7 a) Describe the significance of Clostridium.  
OR  
b) Narrate the fragmentation in bacterial reproduction.
- 8 a) How can you sterilize the glassware by using moist heat sterilization?  
OR  
b) Classify the culture medium based on the consistency.

Cont...

- 9 a) Briefly explain the general characters of Viruses.  
OR  
b) Describe the structure of T<sub>4</sub> bacteriophage.
- 10 a) Summarize the causative organism, symptoms and control measures of typhoid.  
OR  
b) Narrate the control measures of cholera.

**SECTION -C (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a) Highlights the major features of Bacteria.  
OR  
b) Discuss about the various shapes of Bacteria.
- 12 a) Point out the significance of Streptococcus and Staphylococcus.  
OR  
b) Examine the typical growth curve of Bacteria.
- 13 a) Summarize the preservation of pure culture.  
OR  
b) How will you identify the bacteria by using gram staining Technique?
- 14 a) Examine the shapes of viruses.  
OR  
b) Analyze the life cycle of phages.
- 15 a) Discuss about the causative organism, mode of transmission, symptoms and control measures of AIDS.  
OR  
b) Elucidate the causative organism, mode of transmission, symptoms and control measures of small box.

Z-Z-Z

END