

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 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 Name the scientist who discovered Penicillin.  
(i) Huxley (ii) Alexander Fleming  
(iii) Edward Jenner (iv) De Vries
- 2 Who is the Father of Microbiology?  
(i) Spencer (ii) Leeuwenhock  
(iii) Huxley (iv) lamark
3. Which device is used for continuous culture of bacterial cells? .  
(i) Turbidostat (ii) cooker  
(iii) autoclave (iv) oven
- 4 Choose one of the endospore producing bacteria.  
(i) Mucor (ii) Blue green algae  
(iii) Bacillus (iv) chloroplast
- 5 What is Broth medium? .  
(i) solid medium (ii) liquid medium  
(iii) semi solid medium (iv) enriched medium
- 6 Which one of the following is good for sterilizing agent plastic petridishes and sensitive materials?  
(i) ionizing radiation (ii) non ionizing radiation  
(iii) aldehydes (iv) HCL
- 7 Which bacteriophage exhibit Lysogenic cycle?  
(i) alpha series (ii) T series  
(iii) lamda series (iv) gamma series
- 8 Name the genetic materials of animal virus.  
(i) RNA (ii) Cistron  
(iii) DNA (iv) plasmid
- 9 Name the disease caused by Vibrio cholerae.  
(i) Cholerae (ii) mumps  
(iii) syphillis (iv) typhoid
- 10 Choose the disease related with liver inflammation.  
(i) Common cold (ii) polio  
(iii) mumps (iv) viral hapatitis

Cont...

**SECTION - B**

Answer **ALL** Questions

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

- 11 a. Comment on Louis Pasteur.  
OR  
b. Outline the contribution of Edward Jenner.
- 12 a. Comment on batch culture.  
OR  
b Explain the Binary fission of bacteria reproduction.
- 13 a, Comment on Enriched medium and Solid medium.  
OR  
b. Summarise the Gram staining.
- 14 a. Describe the structure T4 bacteriophage.  
OR  
b. Comment on Interferons.
- 15 a. Outline the symptoms and control measures of Diptheria.  
OR  
b. Narrate the causative agents and symptoms of Typhoid.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

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

- 16 Describe the structure of Bacteria with neat sketch.
- 17 Explain in detail about Bacterial growth curve.
- 18 Discuss in different methods of Pure culture.
- 19 Explain the lytic cycle of Bacteriophage.
- 20 Discuss the causative agent and symptoms of AIDS. How will you control it?

Z-Z-Z

END