

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(First Semester)

Branch – **MICROBIOLOGY**

FUNDAMENTALS OF MICROBIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(5 x 1 = 5)

1. Who first discovered *Vibrio cholerae*.
 (a) Needham (b) Paul Ehrlich
 (c) Robert Koch (d) Flemming.
2. Which of the following method is better for demonstration of bacterial capsule
 (a) Wet film India ink preparation (b) Dry film India ink preparation
 (c) KOH mount (d) Alberts staining.
3. Identify the algae are _____ in aquatic food chain.
 (a) Producers (b) Primary consumer
 (c) Secondary consumer (d) Decomposers
4. Which of the following method is used for detection of fungal elements.
 (a) Nigrosin preparation (b) AFB
 (c) KOH mount (d) Alberts staining.
5. State the Protozoa are classified on the basis of
 (a) locomotory organelle (b) shape
 (c) number of nuclei (d) size

SECTION - B (15 Marks)

Answer **ALL** Questions

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

- 6 a Describe how the spontaneous generation theory was disproved.
 OR
 b Explain about the Germ theory of diseases.
- 7 a Describe the composition and structure of Gram positive bacterial cell wall with neat diagram.
 OR
 b Describe the composition and structure of Gram negative bacterial cell wall with neat diagram.
- 8 a Describe are the general characters of Algae.
 OR
 b Classify the asexual reproduction of algae.
- 9 a Explain the asexual reproduction of fungi.
 OR
 b Compare the various modes of fungal reproduction.

Cont...

- 10 a Outline the importance of protozoa.
OR
b How protozoa are classified?

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Discuss the contributions of Antony Van leeuwenhoek and Edward jenner.
OR
b Highlight the contributions of Louis Pasteur and Alexander flemming.
- 12 a Enumerate the bacterial cell components. Describe the structure, arrangements and functions of flagella.
OR
b Elucidate the fluid mosaic model membrane.
- 13 a Outline the SCP Production.
OR
b Elucidate the algae cell structure with a neat sketch.
- 14 a Enumerate the general characteristics and morphology of fungi.
OR
b Analyze the economic importance of fungi.
- 15 a Summarise the types of reproduction in protozoa.
OR
b Outline the binary fission mode of reproduction in protozoa.

Z-Z-Z

END