

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2017
(Second Semester)

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Branch- **BIOCHEMISTRY**

MICROBIOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks!)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 Define phase contrast microscope.
- 2 What is photoautotroph?
- 3 Mention the name of any two actinomycetes.
- 4 What is mycology?
- 5 Name the causative agent of tuberculosis and diphtheria.
- 6 Define the term immunization.
- 7 What is Lytic cycle?
- 8 Define capsomeres.
- 9 What is fermentation?
- 10 Write a note on biogeochemical cycle.

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a What is growth curve? Mention the phases.
OR
b Explain endospore staining.
- 12 a What is cyano bacteria? Explain.
OR
b Write in detail on economic importance of Algae.
- 13 a Explain the normal human microflora.
OR
b Discuss the aetiology and symptoms of tetanus.
- 14 * a Explain physical and chemical mutagenic agents.
OR
b Write short notes on cultivation of viruses.
- 15 a What is rhizosphere? Explain.
OR
b List out the basic concepts in design of a fermentor.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Discuss in detail on : (i) Culture media (ii) Microbial nutrition.
- 17 Describe the cell wall structure of gram positive and gram negative bacteria.
- 18 **Explain the symptoms and prevention of any two air borne diseases.**
- 19 Discuss the structure and classification of viruses with example.
- 20 Explain nitrogen cycle.

Z-Z-Z

END