

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Second Semester)

Branch - **BIOCHEMISTRY**

MICROBIOLOGY

Time : Three Hours '

Maximum: 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10x2 = 20)

- 1 Mention the uses of light microscope.
- 2 Describe the principles of gram staining.
- 3 Write about the types of bacterial flagella
- 4 What are the commercial products of algae?
- 5 Comment on exotoxins.
- 6 Write about the causative organism of Influenza and Tetanus.
- 7 Define Virion.
- 8 What are oncogenic viruses?
- 9 Comment on Rhizosphere.
- 10 Differentiate between symbiotic and non-symbiotic nitrogen fixation.

SECTION - B (25 Marks!)

Answer **ALL** Questions

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

- 11 a Describe the chemical methods of sterilization.
OR
b Discuss bacterial growth curve in brief.
- 12 a Draw a neat diagram of typical bacteria and describe the computer parts in brief.
OR
b Explain the important characteristics of Fungi.
- 13 a Comment on host-parasite interaction.
OR
b Write a short note on aetiology and pathogenesis of chicken pox.
- 14 a Explain plaque assay.
OR
b Write about the characteristics of virus with examples.
- 15 a Describe sulfur cycle.
OR
b Explain the media for industrial fermentations.

SECTION - C (30 Marks!)

Answer any **THREE** Questions

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

- 16 Explain the principle, instrumentation and applications of electron microscope.
- 17 Discuss the life cycle of yeasts.
- 18 Describe the aetiology, pathogenesis and prevention of TB.
- 19 Explain the life cycle and importance of T4 phage.