

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

14 MBQQ2

Branch- MICROBIOLOGY

PRINCIPLES OF MICROBIOLOGICAL METHODS

Time : Three Hours .

Maximum : 75 Marks •

SECTION-A (20 Marks)

Answer ALL questions

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

- 1 Numerical aperture.
- 2 Type of objective lens.
- 3 • AFB.
- 4 CVI Complex.
- 5 Antiseptics.
- 6 Disinfectant. .*
- 7 Gamma rays.
- 8 Tynadallisation.
- 9 Differential media.
- 10 Transport media.

SECTION - B (25 Marks)

Answer ALL Questions

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

- 11 a Briefly comment the structure and functional feature of phase contrast microscope.

OR

b Define : (i) Resolving power (ii) Magnifications.

- 12 a Write the details about motility observing methods.

OR

b What is differential staining? Explain with suitable example.

- 13 a Explain about pasteurization.

OR

b Write the detail about filtration.

- 14 a Comment on fumigation process.

OR

b Explain the roll of alcohol and phenol in microbial growth control.

- 15 a Explain about the microbial culture media preparation.

OR

b ■ Write about any one method for cultivation of anaerobic microorganism.

SECTION - C (30 Marks)

Answer any THREE Questions

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

- 16 * Compare and contrast the principle, methods of operation and utilities of SEM and TEM.
- 17 * How does the growth pattern differ when it is measured by total' counter by viable count? Explain.. .
- 18 Explain the principle and application of heat in sterilization/
- 19 Write the detail about mode of action of chemical agent in sterilization.
- 20 Explain about pure culture technique.