

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2019
(Sixth Semester)

Branch - MICROBIOLOGY

INDUSTRIAL MICROBIOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks!)

Answer ALL questions

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

- 1 Lyophilization.
- 2 Wild Stain.
- 3 Sparger.
- 4 Fluidized bed fermentor.
- 5 Batch sterilization.
- 6 Plate heat exchanger.
- 7 Reverse osmosis.
- 8 Precipitation.
- 9 Semisynthetic penicillins.
- 10 Define hope.**

SECTION - B (25 Marks!)

Answer ALL Questions

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

- 11 a Write the details about primary screening method.
OR
b Explain about fungal preservation method.
- 12 a Give the detail about tower fermenter.
OR
b Explain about the sterilization of fermenter equipments.
- 13 a Write the details about production media sterilization.
OR
b Explain about the mechanism of stirring and mixing in fermentation process.
- 14 a Explain about dialysis.
OR
b Explain about physical methods of cell disruption.
- 15 a Write about solid state fermentation.
OR
b Explain about the method of beer production.

SECTION - C (30 Marks!)

Answer any **THREE** Questions

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

- 16 Give the detail about preservation of industrial important of microorganism.
- 17 Write the details about the configuration of fermenter.
- 18 Explain about industrial important growth and production media formulation.
- 19 Explain about filtration and type of filtration.
- 20 Describe in detail about citric acid production.