

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018
(Second Semester)

Branch – APPLIED MICROBIOLOGY

FERMENTATION & BIOPROCESS TECHNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION -A (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 1 a Write an account on range of fermentation process.
OR
b Discuss the component parts of fermentation process.
- 2 a Write an account on Bioreactors.
OR
b Write a short note on scale up of fermentation industry.
- 3 a Comment on solid state fermentation.
OR
b What you do know about the liquid extraction?
- 4 a Briefly explain the industrial production of wine.
OR
b Give an general account on microbial production of vitamins.
- 5 a Write a short notes on biosensors and its applications.
OR
b Comment on product optimization.

SECTION -B (45 Marks)

Answer any THREE questions

ALL questions carry EQUAL Marks (3 x 15 = 45)

- 6 Discuss in details about the primary and secondary screening methods of industrially important microorganisms.
- 7 What is fermentor? Explain body construction and temperature control of a fermentor with the aid of a neat diagram.
- 8 Write a detailed account on cell disintegration methods.
- 9 Write a detailed account on microbial production of organic acids.
- 10 Give a detailed account on production of antibiotics.

Z-Z-Z

END