

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

Branch - **MICROBIOLOGY**

MICROBIAL ECOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks!)

Answer ALL questions

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

- 1 Ecological Pyramids.
- 2 Food Web.
- 3 Compositing.
- 4 Bioremediation.
- 5 Detoxification.
- 6 Mycorrhizae.
- 7 Phyllosphere.
- 8 Bioleaching.
- 9 Biofuels.
- 10 Biodiversity.

SECTION - B (25 Marks!)

Answer ALL Questions

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

- 11 a Write short notes on Food Chain.
OR
b What is meant by Community Succession.
- 12 a Write about Solid Waste Recycling.
OR
b Explain short notes on Trickling Filter.
- 13 a Write short notes on biosorption of heavy metals mediated by microbes.
OR
b Explain biodeterioration of leather.
- 14 a Write a short note on rust disease of castor.
OR
b Write about VAM micorrhizal associations.
- 15 a Write about BOD and COD.
OR
b What is meant by pesticide degradation?

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Give a detailed account on Darwin's theory of natural selection.
- 17 Explain the various level of treatment of waste water.
- 18 Give a detailed account on microbial population in rhizoplane and phyllosphere.
- 19 Give a detailed note on biological treatment of dyes?
- 20 Explain the production of biofuel from agricultural wastes and its