# PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

## **BSc DEGREE EXAMINATION DECEMBER 2018**

(Sixth Semester)

### Branch - MICROBIOLOGY

# MICROBIAL ECOLOGY

Time: Three Hours Maximum: 75 Marks

#### **SECTION-A (20 Marks)**

Answer **ALL** questions

ALL questions carry EQUAL marks  $(10 \times 2 = 20)$ 

# Write a note on the following:

- 1 Ecological pyramids.
- 2 Secondary consumer.
- 3 Activated sludge.
- 4 Barophiles.
- 5 Biosorption.
- 6 <u>Cellulomonas</u>. sp.
- 7 Soft rot.
- 8 Spermosphere.
- 9 <u>Salmonella, syphi.</u>
- 10 COD.

# **SECTION - B (25 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks  $(5 \times 5 = 25)$ 

11 a Write about species diversity.

OR

- b comment on community succession.
- 12 a Write about Trickling filter.

OR

- b Write about composting process.
- 13 a Detoxification of heavy metals by microbes.

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- b Write about Biodeterioration of paper.
- 14 a Write about VAM micorrhizal association.

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- b Write about wilt diseases of pulses (Red gram).
- 15 a Give a brief account on biofuels.

OR

b Write a note on Biological oxygen Demand(BOD).

## **SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks  $(3 \times 10 = 30)$ 

- Give a detail account on diversity of microbial community in both aquatic and terrestrial environment.
- 17 Write in detail about solid waste recycling.
- Elaborate environmental impact of dyes and its treatment strategies.

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