TOTAL PAGE : 1 14MBU05

PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

 $l+WBCX^{\wedge}$

BSc DEGREE EXAMINATION MAY 2017

(Second Semester)

Branch- MICROBIOLOGY

MICROBIAL DIVERSITY & TAXONOMY

Time: Three Hours

Maximum: 75 Marks -

SECTION-A (20 Marks^

Answer ALL questions

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

- 1 Phylogeny.
- 2 Genus.
- 3 Chlorosome.
- 4 . Hormogonia.
- 5 Mycoplasma.
- 6 Rickettsia.
- 7 Purple membrane.
- 8 Methanogen.
- 9 TMV.
- 10 Obligate Intracellular parasites.

SECTION - B (25 Marks^

Answer ALL Questions

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

11 a Describe about phenetic classification.

 $\cap \mathbb{R}$

- b Explain about taxonomic rank.
- 12 a Give a short note on purple sulfur bacteria.

OR

- b Discuss about classification of cyanobacteria.
- 13 a Write a general account on pasteurellaceae.

OR

- b Brief an account on Chlamydia.
- 14 a Write about thermophilic bacteria.

OR

- b List out the general features of halophilic bacteria.
- 15 a Give a short note on viruses.

OR

b Discuss about viral nucleic acid and capsid.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- Discuss in detail about techniques for determining microbial taxonomy, and phylogeny,
- Explain in detailed about oxygeneic photosynthetic bacteria.
- Write elaborate notes on actinomycetes.
- 19 Give a detailed note on cell membrane of archaebacteria.
- Elaborate on taxonomy of RNA plant virus.