

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

Branch- **MICROBIOLOGY**

APPLIED BIOTECHNOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

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

- 1 Ri Plasmid.
- 2 BT cotton.
- 3 Knockout animal.
- 4 Embryonic stem cells.
- 5 ITGH.
- 6 Bioethics.
- 7 OLA.
- 8 ISH.
- 9 HAT medium.
- 10 SCGT.

SECTION - B (25 Marks!)

Answer **ALL** Questions

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

- 11 a Write short notes on Ti Plasmid.
OR
b Write about the developing of stress and senescence tolerant plants.
- 12 a Brief a note on the characteristics of retro viral vectors used in animal cloning.
OR
b How are transgenic cattles produced?
- 13 a What are subunit vaccines? Explain.
OR
b Explain IPR and its role.
- 14 a Describe RFLP and their uses.
OR
b Write about the principle of ASO test.
- 15 a Give a brief account on the monoclonal antibody production.
OR
b Write a short note on recent developments of Biotechnology.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Write a note on plant tissue culture and protoplast.
- 17 Explain the various methods for developing transgenic animals.
- 18 Explain the protein products - Insulin and Interferon.
- 19 Describe the principle of DNA microarray and its uses.
- 20 Give a brief account on the gene therapy.