

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION JUNE 2014
(Sixth Semester)

Branch – BIOTECHNOLOGY

APPLIED ASPECTS OF BIOTECHNOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

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

- 1 State any two applications of dendrimers.
- 2 Define nanoparticles.
- 3 What is feeder layer?
- 4 Mention the significance of stem cells.
- 5 Define triplex DNA.
- 6 Bring out any two salient features of Alzheimer's disease.
- 7 What is tissue engineering?
- 8 Name any two regenerative medicines.
- 9 What is human cloning?
- 10 Mention the role of USDA.

SECTION - B (25 Marks)

Answer ALL Questions

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

- 11 a Comment on micelles.
OR
b Write an account on quantum dots.
- 12 a Discuss the applications of embryonic stem cells.
OR
b Write a note on therapeutic cloning.
- 13 a Bring out the clinical applications of triplex DNA.
OR
b How does protein based therapy works for HIV?
- 14 a Give an account on biomaterials and its uses.
OR
b Comment on skin replacement.
- 15 a How are therapeutic protein produced in animals?
OR
b Discuss the ethical concern of cloning.

SECTION - C (30 Marks)

Answer any THREE Questions

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

- 16 Discuss the properties of nano particles.
- 17 Illustrate the procedure for bone marrow transplantation.
- 18 Write a detailed account on interference RNA and its therapy.
- 19 Describe artificial organs.
- 20 Elucidate various problems in human cloning.

Z-Z-Z

END