

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

Branch- ZOOLOGY

**BIOTECHNOLOGY - II**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer ALL questions

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

**Explain / Define :**

- 1 Cell line.
- 2 Natural Media.
- 3 Transgenic sheep.
- 4 RAPD.
- 5 Callus.
- 6 Protoplast.
- 7 Cryopreservation.
- 8 Antibiotics.
- 9 Spirulina.
- 10 Immobilisation.

**SECTION - B (25 Marks)**

Answer ALL Questions

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

- 11 a Write a short note on history of animal cell culture.  
OR  
b Explain the primary cell culture.
- 12 a Write a short note on erythropoietin.  
OR  
b Explain the major steps involved in RFLP analysis.
- 13 a Describe the explant culture method.  
OR  
b Write a short note on somatic hybridization.
- 14 a Write a note on basic design of a fermenter.  
OR  
b Explain - Vitamin B12.
- 15 a Write a note on single cell protein.  
OR  
b Describe the ideal characteristics of single cell protein.

**SECTION - C 130 Marks!**

Answer any THREE Questions

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

- 16 Write an essay on cultivation of animal cells in Bioreactors.
- 17 Write an essay on RAPD analysis.
- 18 Explain the isolation of protoplast and fusion of protoplast.
- 19 Explain the products of primary metabolites.
- 20 Write an essay on yeast as SCP.