

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIRST & SECOND SEMESTER – APRIL 2018

AZ 1505 / AZ 2506– BASIC BIOTECHNOLOGY

Date: 02-05-2018

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

PART - A

Answer ALL questions, each in a few words

10 × 2 = 20 marks

01. Define intellectual property.
02. Mention the differences between patent and copyright.
03. What is secondary cell culture?
04. Explain the significance of trypsinization in tissue culture?
05. Enumerate the use of restriction endonucleases in rDNA technology.
06. What are cosmid vectors?
07. Define biosensor.
08. What is fermentation?
09. Give one reason why GM foods are harmful?
10. What are the research uses of transgenic fish?

PART B

Answer any FOUR questions, each in about two pages

4 × 10 = 40 marks

11. Discuss briefly the interdisciplinary activity of biotechnology.
12. What are the basic requirements for a tissue culture?
13. Give a brief classification of restriction enzymes. Explain with an example.
14. Illustrate the design and working of a bioreactor.
15. What is cryopreservation? What are its applications?
16. Write notes on: (i) Gene therapy and (ii) Nanotechnology

PART C

Answer any TWO questions, each in about 4 pages

2 × 20 = 40 marks

17. Discuss the applications in animal biotechnology.
18. Discuss the Biosafety guidelines.
19. Give an account of the principle and uses of PCR.
20. Explain the applications of biotechnology in aquaculture.
