

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

K21P 0256

Reg. No. : .....

Name : .....

IV Semester M.Sc. Degree (CBSS – Reg./Suppl. (Including Mercy Chance)/Imp.)  
Examination, April 2024  
(2014 Admission Onwards)  
**ZOOLOGY**  
**ZOO 4C12 : Biotechnology and Bioinformatics**



Time : 3 Hours

Max. Marks : 60

- i. Answer any two of the following : (2×12=24)
- 1) Write an essay on the of enzymes in genetic engineering.
  - 2) Discuss the different gene sequencing methods.
  - 3) Describe the ethical and social implications of biotechnology.
  - 4) Write an essay on the biological databases, mention the nucleic acid codes used in database formats.
  - 5) Give an account of the enzymes employed in genetic engineering.
  - 6) Discuss the potential hazards and impacts of biotechnology on society.
- ii. Answer any two of the following : (2×8=16)
- 7) Explain the construction of Chimeric DNA.
  - 8) Briefly explain the different gene cloning vectors.
  - 9) Explain the construction of cDNA genomic libraries.
  - 10) What is transfection ? Explain different transfection methods.
- iii. Answer any four of the following : (4×5=20)
- 11) Distinguish chromosome walking and chromosome jumping.
  - 12) Write notes on terminator genes.
  - 13) What is gene therapy ? Enlist its applications.
  - 14) Write notes on DNA finger printing.
  - 15) Write notes on BLAST and FASTA.
  - 16) Explain the intellectual property rights.
  - 17) Comment on special vectors.
  - 18) Explain chromosome walking.