

SHIVAJI COLLEGE, UNIVERSITY OF DELHI

DEPARTMENT OF ZOOLOGY

INTERNAL TEST (Academic Year 2023-24)

Name of the Course	: B.Sc. (P) Life Sciences	Semester	: V
Name of the Paper	: Animal Biotechnology	Faculty Name	: Dr. Ankita Dua
Duration	: 1 hr	Maximum Marks:	25
Date of Test	: 20.10. 2023		

1. What are cloning vectors? Give characteristics of good cloning vectors. Name the vectors used for cloning larger pieces of DNA from eukaryotic cells. 4
2. Define restriction enzymes with examples. Elaborate on the pattern of cleavage, classification and nomenclature of restriction enzymes. 4
3. What are competent cells? 1
4. What is alpha complementation? 1
5. Differentiate between: 3*2=6
 - a. Blunt & cohesive ends
 - b. Cosmid & plasmid
 - c. Isoschizomer & isocaudomers
6. Expand the terms: 2*1=2
 - a. YAC
 - b. pUC
7. State the contribution of: 3*1=3
 - a. Karl Ereky
 - b. Smith, Nathans & Arber
 - c. Stanley Cohen & Herbert Boyer
8. Define electroporation. 1
9. Write down functions of: Reverse transcriptase, DNA ligase, CRISPR Cas-9 3*1=3

Faculty Signature:

