

Mode of Examination: Open Book Examination

SET- 2

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| Unique Paper Code | : | 42237903 |
| Name of the Paper | : | DSE: Animal Biotechnology |
| Name of the Course | : | B.Sc. (Prog.) Life Sciences - LOCF |
| Semester | : | Semester – V |
| Duration | : | 3 hours |
| Maximum Marks | : | 75 Marks |

Instructions for Candidates

- Write your Roll No., Name of the paper, Course, Semester, and Date of examination on the first page of answer sheet.
- Attempt '**ANY FOUR**' QUESTIONS. All questions carry equal marks.
- Draw well labeled diagrams wherever necessary.

Q1. Describe the recombinant DNA technology. Enumerate the applications of recombinant DNA technology with suitable examples of each application.

18.75

Q2. Describe the various modification enzymes used in recombinant DNA technology giving example of the chemical reaction catalyzed by each enzyme. Write a short note on Restriction endonuclease enzymes.

18.75

Q3. Describe the use of plasmid pUC 18 and cosmid vectors in gene cloning. Write a short note on expression vectors.

18.75

Q4. Describe the New Generation Sequencing method illumina for DNA sequencing. What advantage it has over the Sanger's method?

18.75

Q5. Give a detailed account on the production of transgenic animals. Write a note on the applications of transgenic animals.

18.75

Q6. Describe the use of Gene therapy for treatment of genetic diseases along with examples each from in-vivo and ex-vivo method.

18.75