



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examinations (April 2019)

School : School of Engineering

Program: M.Tech Bioengineering

Course: Recombinant DNA Technology

Course Code: BEN521

Semester: II

Total Marks : 50

Duration (min) : 120

Answer any 5 questions.

Each question carries 10 Marks.

1. What is blue white screening? How can it be employed in recombinant DNA technology? Explain with a diagram.
2. What is a high capacity vector? Elucidate the structure and function of BAC.
3. Write a note on Restriction Enzyme with details on its type, function and role in recombinant DNA technology.
4. What is Southern Hybridization? Explain with a diagram its role in gene detection.
5. What is cDNA library ? How is it constructed ? Explain with a diagram.
6. Describe the construction and functioning of a genomic DNA library.
7. What is real time PCR? Explain with a diagram.
8. What are the reagents and conditions of a PCR? How can annealing temperature and length of primer affect PCR? Discuss.
9. Discuss the vector for increasing protein production in cells.
10. Discuss the vector system for solubilising proteins and fusion proteins.