



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examinations (December 2018)

School : Engineering **Program:** B.Tech Biotechnology

Course: Genetic Engineering I **Course Code:** BTE304

Semester: V **Max Marks:** 50 **Duration (mins) :**120 min

Note: Answer any 5 questions.

- Q1. Explain the construction of a high capacity vector BAC. (10)
- Q2. Describe the method and utility of Southern Hybridization in detail. (10)
- Q3. Describe the production of Bt crops in detail. (10)
- Q4. What are the concerns of making GM crops? Give arguments for and against GM Crops. (10)
- Q5. Explain the effect of annealing temperature in PCR. (10)
- Q6. Discuss Agrobacterium mediated plant transformation with a drawing of Ti plasmid. (10)
- Q7. Describe the principle of Genomic DNA library construction and method to identify the clones. (10)
- Q8. Draw a pET vector and describe its method of controlling protein production by IPTG induction. (10)
- Q9. What is blue white screening? Explain the principle of blue white screening with suitable vector. (10)
- Q10. What is real time PCR? Discuss its principle and utility. (10)