



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examinations (December 2018)

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

Course: Molecular Biology__ **Course Code:** BEN510

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

Note: Answer any 5 questions.

- Q1. What is T_m of DNA? What are the effects of GC content on T_m ? Explain the triple helical DNA structure in detail. (10)
- Q2. State and describe the rules of DNA replication. (10)
- Q3. Write a note on DNA polymerases. (10)
- Q4. Explain briefly what are the steps of transcription. (10)
- Q5. Discuss the mechanism of Poly A tailing in mRNA. (10)
- Q6. What is operon concept? Describe Lac operon in detail. (10)
- Q7. What is attenuation? Describe trp operon. (10)
- Q8. Describe the steps of initiation in translation. (10)
- Q9. What are post translational modifications of proteins? Explain. (10)
- Q10. What is a promoter? Discuss the technique to identify a promoter. (10)