



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examination (December 2019)

School: School of Engineering

Program: B.Tech Biotechnology

Course: Fundamentals of Biotechnology and Biology

Course Code: BTE201

Semester: III

Max Marks: 40

Duration (mins) : 90

Answer any FOUR questions.

Q 1. Write Short notes. (Any FIVE)
(Each question carries 2 marks)
[10]

- Endosymbiotic theory
- Central dogma
- Crossing over
- Enzyme specificity (varying degrees)
- Environmental sustainability
- Simple and differential staining

Q 2. Answer any TWO questions.

(Each question carries 5 marks)

[10]

- Explain mitosis with the phases involved and an appropriate diagram.
- What is endocytosis and what are its types.
- What is the difference between exonucleases and endonucleases? Enlist and explain classes of restriction endonucleases

Q.3 Answer any TWO questions.

(Each question carries 5 marks)

[10]

- a. What are antibiotics? What is the role of biotechnology in advancement of antibiotics? What are types of antibiotics as per their spectrum? What is the major concern related to antibiotics?
- b. Enlist and explain different ways of protecting the intellectual property.
- c. Explain and compare gram staining and acid-fast staining.

Q.4 What are cell junctions? Explain types of cell junctions with diagrams. Write functions of each type of cell junctions. **[10]**

Q.5 What is the role of biotechnology in the environment? Enlist strategies of solid waste management. What are the different methods of composting? **[10]**
