

FACULTY OF ENGINEERING**B.E. (AICTE)(CE/EE/Inst./CSE) III-Semester (Main) Examination, December 2019****Subject: Biology for Engineers****Time: 3 hours****Max. Marks: 70****Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.****PART – A (10 x 2 = 20 Marks)**

1. Write about cell theory of living organisms.
2. Explain the important functions of enzymes.
3. How are microbes economically important?
4. Write a note on photosynthesis in plants.
5. What is meiotic cell division?
6. What are chromosomes? Write their importance.
7. Give a brief note on hepatitis.
8. What is AIDS? Explain its cause and prevention.
9. Write a note on tissue engineering.
10. What are biofertilizers? What is their application?

PART – B (5 x 10 = 50 Marks)

11. (a) Explain the general classification of proteins.
(b) Describe the structure of eukaryotic cell.
12. (a) How does plants absorb nutrients?
(b) Explain the control measures of microorganisms.
13. (a) State and explain Mendel's laws.
(b) What are nucleic acids? Write the importance of nucleic acids as genetic material.
14. (a) What is an antibody? Explain briefly the structure and types of antibodies.
(b) Explain the causes, symptoms and preventive measures for diabetes.
15. (a) What is cloning? Explain the process of cloning and its applications.
(b) Elucidate the role of biopolymers and their applications in biology.
16. (a) Give a detailed account on classification of vitamins.
(b) Elucidate the importance of nitrogen fixation in plants.
17. (a) What is cancer? Explain the causes and prevention of cancer.
(b) Explain the process of drug discovery and its applications
