

Code: 19BS1303

II B.Tech - I Semester – Regular Examinations – MARCH 2021

LIFE SCIENCES FOR ENGINEERS

(Common to CIVIL, CSE, ME)

Duration: 3 hours

Max. Marks: 70

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- Note: 1. This question paper contains two Parts A and B.
2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.
3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.
4. All parts of Question paper must be answered in one place.
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PART – A

1. a) What are Saprophytes?
b) Name some Enzymes and write their industrial applications.
c) Name the place where TCA cycle occurs in cell and explain its importance.
d) What are Mendel's laws?
e) Infer Animal cloning?

PART – B

UNIT – I

2. a) Distinguish between Prokaryotes and Eukaryotes? 6 M
b) Explain the classification of living organisms based on cellularity? 6 M

OR

3. a) Write the comparison between flying bird and Aircraft? 6 M
b) Write the classification on the basis of carbon and energy sources? 6 M

UNIT – II

4. a) Explain the structure of Proteins. 6 M
b) What are Antibodies? Explain. 6 M

OR

5. a) Explain the process of Fermentation. 6 M
b) Write the comparison between DNA and RNA. 6 M

UNIT-III

6. Explain briefly Glycolysis cycle. 12 M

OR

7. Discuss the Mechanism of Photosynthesis. 12 M

UNIT – IV

8. a) Distinguish between Mitosis and Meiosis. 6 M
b) Define Single gene disorder. Write short note on Sickle cell disease. 6 M

OR

9. a) Write about Gene mapping. 6 M
b) Write short notes on Genetic code. 6 M

UNIT – V

10. a) Write short notes on transgenic microbes. 6 M
b) Write about Biochips. 6 M

OR

11. Explain Recombinant vaccines and its types. 12 M