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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech III Year I Semester Regular Examinations February-2021

BIOLOGY FOR ENGINEERS

(Civil Engineering)

Time: 3 hours

Max. Marks: 60

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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|---|---|--------------------------------------------------------------------|----|
| 1 | a | What is cell? | 2M |
| | b | What is meiosis? | 2M |
| | c | List some important organic compounds present in living organisms. | 2M |
| | d | What are the two Purines & Pyrimidines of DNA? | 2M |
| | e | Write the difference between aerobic & anaerobic respiration. | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|---|---|-------------------------------------------------------------------|----|
| 2 | a | Define Habitat. Explain Terrestrial Habitat. | 5M |
| | b | Write short notes on unicellular and Multicellular with examples. | 5M |

OR

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| 3 | a | Draw ultra structure of Prokaryotic cell. | 5M |
| | b | Classify Kingdom Protista and Kingdom Animalia. | 5M |

UNIT-II

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| 4 | Write a short note on Gene Mapping. | 10M |
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| 5 | a | Give an account on Down's syndrome. | 5M |
| | b | Write about Turners syndrome. | 5M |

UNIT-III

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| 6 | Describe the enzyme nature, properties and nomenclature. | 10M |
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| 7 | What are the macro molecules and its types? Write the functions of macro molecules. | 10M |
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UNIT-IV

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| 8 | Give brief account on hierarchy of DNA structure from single stand to double helix. | 10M |
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OR

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| 9 | Explain genetic code & Degeneracy of genetic code. | 10M |
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UNIT-V

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| 10 | Describe Krebs cycle. | 10M |
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OR

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| 11 | Write a note on sterilization and various techniques used. | 10M |
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END