BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION)

CLASS: B.TECH SEMESTER: IV
BRANCH: BIOTECHNOLOGY SESSION: SP/2020

SUBJECT: BE216 ENZYME TECHNOLOGY

TIME: 2 HOURS FULL MARKS: 25

INSTRUCTIONS:

- 1. The total marks of the questions are 25.
- 2. Candidates may attempt for all 25 marks.
- 3. Before attempting the question paper, be sure that you have got the correct question paper.
- 4. The missing data, if any, may be assumed suitably.

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| Q1 Q1 | (a) (b) | State different properties of enzymes. Propose the model for multi-substrate enzyme catalyzed reactions. | [2] [3] | CO 1 2 | BL 1 2 |
|----------|------------|--|------------|--------------|--------------|
| Q2 Q2 | (a) (b) | Reveal the Induced fit model for enzyme catalysis. Differentiate between multienzyme complex and multifunctional enzymes. | [2] [3] | 1 2 | 2 4 |
| Q3 Q3 | (a) (b) | Evaluate the significance of Isozymes. Examine the impact of enzyme substrate reaction kinetics. | [2] [3] | 2 2 | 5 2 |
| Q4 Q4 | (a) (b) | Derive the equation for deactivation process of enzyme protein. Illustrate the process for isolation & selection of enzyme producing bacteria. | [2] [3] | 2 3 | 3 |
| Q5 Q5 | (a) (b) | | [2] [3] | 1 2 | 1 5 |

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