JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- FEB-2023

COURSE CODE (CREDITS): 21B1WPH831(3)

COURSE NAME: BIOSENSORS   MAX. MARKS: 15

COURSE INSTRUCTORS: DR. RAGINI RAJ SINGH

                                                                MAX. TIME: 1 HOUR

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q.1. There are certain characteristic attributes for biosensors which can reflect the performance of biosensors. Discuss with examples.

[CO: 1, Marks: 3.0]

Q.2. List the various factors affecting the electro analytical performance of biosensors.

[CO: 1, Marks: 2.0]

Q.3. Discuss all the main components of biosensors with suitable diagram.

[CO: 1, Marks: 2.0]

Q.4. What are the limitations, advantages and disadvantages of biosensors?

[CO: 2, Marks: 2.5]

Q.5. What are the bio-receptor molecules discuss with examples? Also explain the key-lock mechanism for selectivity in biosensors.

[CO: 2, Marks: 2.0]

Q.6. How enzymes can be immobilized onto electrode surface, discuss the mechanism with schematics?

[CO: 2, Marks: 1.5]

Q.7. Discuss the mandatory issues concerning the production of biosensors at commercial scale.

[CO: 3, Marks: 2.0]