

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

B.Tech-VIII Semester (Open Elective)

COURSE CODE (CREDITS): 21B1WPH831 (03)

MAX. MARKS: 15

COURSE NAME: Biosensors

COURSE INSTRUCTORS: Ragini Raj Singh

MAX. TIME: 1 Hour

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

| Q.No | Question | CO | Marks |
|------|--|----|-------|
| Q1 | Why linearity, sensitivity and selectivity in biosensors are important in each case, provide necessary discussions with example. | 1 | 3 |
| Q2 | Which are the main components of biosensors, draw a schematic and discuss each part? | 1 | 3 |
| Q3 | Discuss any three types of variables those can affect the electro-analytical performance of biosensors. | 1 | 3 |
| Q4 | Explain main functions of a measurement system with importance of each part. | 2 | 3 |
| Q5 | Discuss the dynamic characteristics of a measurement system with point-to-point explanation. | 2 | 3 |