18G6

B. Tech. EXAMINATION, 2022

(Seventh Semester)

(C. Scheme) (Main & Re-appear)

(CSE)

CSE405C

SOFTWARE DESIGN AND ENTERPRISE COMPUTING

Time: 3 Hours [Maximum Marks: 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(5-N22-19/18) M-18G6

P.T.O.

- 1. Write short notes on the following: $3\times5=15$
 - (a) Potentiometric Biosensor
 - (b) Future prospects of point-of-care testing
 - (c) Microbial sensor
 - (d) SPR
 - (e) Biosensor and nanotechnology.

Unit I

- 2. "Biosensor is the marriage between biology and electronics." Explain and enumerate its various applications.
- **3.** Write a detailed note on the role of immobilization in construction of biosensor. **15**

Unit II

- 4. What are the different glucometers available in market? Explain the working and the merits for management of glucose at home. 15
- 5. Explain micro fabrication technology adopted to prepare Biosensors. Enlist important features of i-STAT system.

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Unit III

- 6. What is SPR Sensing? Explain its important features and application in detail. 15
- 7. Discuss the biosensors based on evanesant waves, in detail.

Unit IV

- 8. Describe biochips and their application in modern sciences.
- Explain commercialization and future prospects of Biosensors.