

No. of Printed Pages : 03

Roll No.

G-123

B. Tech. EXAMINATION, May 2017

(Seventh Semester)

(B. Scheme) (Re-appear Only)

(BT)

BT-405-B

BIOSENSORS

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 at least *one* question from each Unit. All questions carry equal marks.

(3-39/18)M-G-123

P.T.O.

Unit I

1. “Biosensor is the marriage between biology electronics.” Explain and enumerate its various applications. **15**
2. Write in detail the importance of incorporation of “Biosensor for non-invasive clinical analysis”. **15**

Unit II

3. What is SPR ? Explain its principle, important features and applications in detail. **15**
4. Describe the principle, working and applications of Biosensors based on evanescent Waves. **15**

Unit III

5. Explain the development and applications of Biosensor in environmental monitoring and management.

6. Discuss the importance of biosensors in bioprocess industries. **15**

Unit IV

7. Explain micro fabrication technology adopted to prepare biosensors. Enlist important features of i-STAT system. **15**
8. Define Biochip ? Discuss the advantages and applications of biochip in modern sciences. **15**