

Code: R7412304

**R7**

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012  
**BIOSENSORS AND BIOELECTRONICS**  
(Biotechnology)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions  
All questions carry equal marks

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1. Explain principle of biosensors. Add a note on advantages and limitations of biosensors.
2. Write about:
  - (a) Biocatalysts biosensors.
  - (b) Membranes used in biosensor constructions.
3. Explain principle and applications of transducers.
4. Describe applications and uses of biosensors in clinical chemistry and medicine.
5. Write about low cost –biosensor for industrial processes for online monitoring.
6. Describe development of molecular arrays as memory stores.
7. Write about:
  - (a) Molecular switches.
  - (b) Mechanisms of unit assembly.
8. Describe information processing for a priomolecular photonic computer.

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