## 2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY IV B.TECH II SEMESTER REGULAR EXAMINATIONS BIO MATERIALS

(BIO-MEDICAL ENGINEERING)

**APRI/MAY 2006** 

TIME : 3HOUR MARK :100

## Answer any FIVE Questions All Questions carry equal marks

1.What is the need for biomaterial? Explain four major types of biomaterials in terms of interfacial response of tissues.

2. List the factors, which cause metallic corrosion and explain their significance.

3. Classify biopolymers. Give the characteristics of each group.

4. Explain the special features of polymers to be used as drug delivery systems. Give example of such polymers.

5. Explain the reaction, which occurs at the metal-tissue interface of metallic implant. Compare the behaviors of different metals at the metal tissue interaction site.

6. Explain in detail the variables to be considered while performing in vivo testing of biomaterials.

7. Discuss the features of allogenic tooth transplants. What are the advantages and disadvantages of allogenic tooth transplants?

8. What are temporary fixation devices? Explain their functions.