**ROLLNO RR 421101** 

## 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. Explain the concept of contact angle and what are the factors on which the contact angle depends upon.
- 2. Explain the difficulties that are encountered while designing metallic implants.
- 3. Explain the special properties of PMMA and give its medical applications.
- 4. Discuss the performance of poly glycolic acid, poly lactic acid as resorbable polymeric bio materials.
- 5. Explain the desirable properties of implantable bioceramics used for medical applications.
- 6. Compare in vivo and in vitro testing of biomaterials.
- 7. What are alveolar bone replacements? Explain their functional requirements.
- 8. What are the problems associated with the artificial joints? How are the problems associated with the artificial joints minimized?

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