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?