
End Term Examination (December 2018)

School: School of Engineering

Program: M.Tech Bioengineering (Biomedical)

Course: Advances in Biomaterials

Course code: BEN502

Semester: I

Max Marks: 50

Duration (mins) : 120

PART-A

Answer ALL questions.

Each question carriers 4 marks.

Q1. Write short notes

[20]

- (a) Biocompatibility of metals
- (b) Host-tissue reaction
- (c) Hydroxyapatite
- (d) Natural polymer
- (e) Orthopaedic implants

PART-B

Answer any TWO questions.

Each question carriers 15 marks.

[30]

Q2. Compare the different types of biomaterials on the basis of their performances.

or

Explain the corrosion behaviour of different metallic implants.

Q3. Justify the use of ceramics as biomaterials.

or

Short notes:

- (a) Inert ceramics
- (b) Bio-glass

Q4. What is a biodegradable polymer ? Give a brief on synthetic polymeric membranes and their biological applications.

or

Explain various sterilization processes of implantable biomaterials.