R09

CODE NO: C0307

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH I SEMESTER EXAMINATIONS APRIL-MAY 2012
BIOCHEMCIAL AND BIOPHYSICAL TECHNIQUES
(BIO TECHNOLOGY)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks

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1.a) Explain the structure of plasma membrane in brief.
b) Discuss the electrochemical properties of membranes and discuss how action potentials are spread along the neve membranes.

2. Write short notes on
a) Temperature programming in GLC.
b) Affinity chromatography of recombinant proteins

3. Explain the principle of Electrophoresis. Discuss how proteins of different molecular weight get separated in SDS – PAGE.

4. What is peptide mapping, explain different steps involves in it.

5. Explain the working principle of normal Centrifuge and an Ultra centrifuge. Discuss applications of ultracentrifuge.

6. Explain the principle of working of HPLC. Give a line diagram of the instrument and discuss about different columns used in HPLC.

7. Explain how CD and ORD work in the structural elucidation of Compounds.

8. Explain the principles and working of light and Electron microscope.

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