Code No: D5107 **R09**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH II - SEMESTER EXAMINATIONS, APRIL/MAY 2012
MEMBRANE TECHNOLOGY
(CHEMICAL ENGINEERING)

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

Answer any five questions
All questions carry equal marks

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1. Discuss about the classification and characteristics of membrane separation processes.

2. What do you mean by immersion precipitation? Discuss about preparation of synthetic membranes.

3. Discuss about the pressure driven membrane processes with examples

4. Describe about gel- layer model and osmotic pressure model.

5. Describe about tubular module and capillary module. Give their merits and demerits.

6. Explain in detail about characterisation of membranes.

7. What is membrane fouling? Explain the different methods to reduce fouling of membrane.

8. Write short notes on the following
   a) Chain flexibility
   b) Electrodialysis
   c) Membrane reactors

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