Code No: OR411352 **OR**

IV B.Tech I Semester Supplementary Examinations, April/May 2005
PROCESS CONTROL
(Electronics & Control Engineering)

Time: 3 hours **Max Marks: 70**

Answer any FIVE Questions
All Questions carry equal marks

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1. Obtain the mathematical model of a continuous stirred tank reactor.
2. (a) Define Controller?
   (b) Explain the principle of different types of discontinuous controller modes with examples. And mention their applications.
3. Briefly explain the various methods of measuring temperature.
4. Explain in detail about Hydraulic, Pneumatic and Electronic proportional controller
5. Explain Feed forward and Ratio control with appropriate examples?
6. Describe briefly how the pressure of the steam is controlled in the boiler drum with mathematical explanation.
7. Discuss how the conversion rates in plug flow and back mixed reactors with mathematical explanation.
8. List various variables to be measured and controlled in nuclear power plant.

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