Code No: B2101/R10 **R10**

II B.Pharmacy I Semester Regular Examinations, Mar 2014
PHARMACEUTICAL ENGINEERING

Time: 3 hours **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

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1. Explain the terms mole, mole fraction and mole volume [15]
2. (a) What are the advantages of differential manometer over simple manometers?
   (b) Write about various types of fluid flow. [8+7]
3. (a) Describe the construction and working of piston and plunger pumps.
   (b) Write notes on rotary pumps. [8+7]
4. (a) Write the application of Kozeny equation in filtration and discuss its limitations.
   (b) Write the relation between Kozeny and the Poiseuille equation. [8+7]
5. (a) Describe how nucleation and crystal growth takes place during crystallization?
   (b) Define polymorphism? what is the importance of polymorphism in pharmacy? [8+7]
6. (a) Write the approaches to dehumidification?
   (b) Write the applications of dehumidification and humidity control? [8+7]
7. Describe in detail about factors influencing the selection of materials for the pharmaceutical plant construction with examples. [15]
8. Write in detail about the preliminary safety procedures given to the persons in fire and chemical hazards in the pharmaceutical industries. [15]

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