

FACULTY**B. Pharmacy 2/4 I Semester (Non CBCS) (Backlo) Examination, November 2018****Subject : Pharmaceuticals Enineerin I****Time : 3 Hrs
70****Max. Marks:*****Note: Answer all questions. All questions carry equal marks.***

- 1 (a) Discuss the factors to be considered in the selection of materials for pharmaceutical plant construction. (7)
(b) What is alvanic corrosion and explain how it can be prevented. (7)
OR
(c) Describe the terms steady and unsteady state with suitable example. (7)
(d) Discuss the important properties, sues of Aluminium and its alloys in pharmaceutical industry. (7)
- 2 (a) What is a manometer? Derive an equation applicable for differential manometer. (7)
(b) Describe the construction, advantaes, and disadvantaes of any one heat exchaner. (7)
OR
(c) Compare orifice meter with a venture meter. (7)
(d) Write a note on (i) Steam trap (ii) condensers (7)
- 3 (a) With a neat sketch, describe the desin and operation of any one type of reciprocatin pump. (7)
(b) Name the different devices used for the transportation of solids. Describe pneumatic conveyor. (7)
OR
(c) Explain abt the centrifual pump theory. (7)
(d) Describe the desin and workin of different types of fans used for the transportation of ases. (7)
- 4 (a) Explain the varis methods used for the determination of humidity. (7)
(b) With a neat sketch explain the refrieration system usin compressor. (7)
OR
(c) Discuss the factors that determine the refrieration load in pharmaceutical plant. (7)
(d) Describe the construction and workin of Air condition with neat labelled diaram. (7)
- 5 (a) Write Kozeny equation for filtration explainin the symbols used. What are the limitations of Kozeny's equation. (7)
(b) ive the construction, workin and uses of horizontal centrifue. (7)
OR
(c) Describe the construction, workin and uses of streamline filters. (7)
(d) Discuss the construction and workin of a p erforated basket centrifue. (7)
