

Total No. of Questions : 4]

SEAT No. :

P3985

[Total No. of Pages : 1

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M.Pharmacy (Semester - I)

PHARMACEUTICAL PLANT DESIGN AND OPERATIONS

(2013 Pattern) (Credit System)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates :

- 1) Question number one is compulsory.
- 2) Figures to the right indicate full marks.
- 3) Draw well labeled diagrams wherever necessary.

Q1) Discuss in detail revised schedule M and Factory Act. [10]

Q2) Attempt any three from following : [3 × 5 = 15]

- a) Discuss layout and operational facilities for Ointment.
- b) Write on design of compressed air as utility service.
- c) Explain design and operational facilities for sterile powder ready for reconstitution.
- d) Write on fuel storage and medical services in plant support services.

Q3) Short note (any three) : [3 × 5 = 15]

- a) Layout and operational facilities for Dry syrup
- b) Administrative block and training center in plant support services
- c) Design and Layout for Liquid Orals
- d) Design of water as utility services

Q4) Discuss in detail design and operation of Q.C. Laboratory. [10]

OR

Define effluent, write its complications and describe in detail design of effluent treatment plant.

