

Question Paper

Exam Date & Time: 03 Dec 2019 (09:30 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Pharmaceutical Engineering [PCE-BP304T - S2]

Marks: 75

Duration: 180 mins.

II Long Answers

Answer all the questions.

- 1) Describe the construction, working, advantages and disadvantages of colloidal mill. (10)
- 2) a) Explain the principle, construction and working of a dryer which can be used for drying, mixing and granulation. (5)
b) Explain the mechanisms of liquid mixing. What are tumbling mixers? (3+2)

III Short Answers

Answer all the questions.

- 1) Explain the working of a cyclone separator with its uses. (5)
- 2) Explain the principle, assembly and working of a distillation apparatus that is used to prepare Water for Injection. (5)
- 3) Write a brief note on the economy and capacity of a multiple effect evaporator. (5)
- 4) Explain any five factors affecting the selection of filtration equipment. (5)
- 5) Discuss the construction and working of semi-continuous centrifuge. (5)
- 6) Discuss five factors influencing rate of corrosion. (5)
- 7) Classify the types of glass used in pharmaceutical packaging as per IP. What is flaking? (4+1) (5)

-----End-----