Code: 15R00301

R15

B.Pharm II Year I Semester (R15) Supplementary Examinations June 2018
PHARMACEUTICAL ENGINEERING

Time: 3 hours   Max. Marks: 70

PART – A
(Compulsory Question)
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1   Answer the following: (10 X 02 = 20 Marks)
  (a)   Write about Bernoulli's equation.
  (b)   Write a short note on conveyors.
  (c)   Discuss on wet bulb & adiabatic saturation temperature.
  (d)   Explain about rate & theory of drying.
  (e)   Give an account on nucleation mechanisms process.
  (f)   What are the importance of filter aids & filter media?
  (g)   Write a short note on Bag filters.
  (h)   Write about theory of mixing.
  (i)   Add a note on measurement of temperature, pressure & vacuum.
  (j)   Write a short note on reactors.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2   Write in detail about turbine pumps and centrifugal pumps with examples.
OR
3   Explain in detail about concept, mechanism, factors, prevention and control methods for corrosion.

UNIT – II

4   Explain about the concept, importance and theory of drying & note on tray dryer.
OR
5   Discuss importance & applications of evaporation. Write a note on film evaporators.

UNIT – III

6   Explain about theory, principle, construction, working of magma and Krystal crystallizer.
OR
7   Write about theory, factors and applications of filtration.

UNIT – IV

8   Describe about sigma blade mixer & planetary mixer with neat diagram.
OR
9   Discuss about techniques for size separation & note on cyclone separated.

UNIT – V

10   Explain about automatic process control systems & process variables.
OR
11   Discuss about elements of computer aided manufacturing & write a note on reactor design for
         chemical reactions.

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