

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – NOV 2016

Time: Three Hours

Max. Marks: 80 Marks

PHARMACEUTICAL ENGINEERING (Revised Scheme - 2)

Q.P. CODE: 1964

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Discuss in detail about "Multiple effect evaporation". Also, add a note on the methods of introducing feed into the evaporator.
2. Explain the construction and working of "Ball mill". List-out its modifications.
3. Explain the construction and working of Belt conveyor and Screw conveyor.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Discuss about plastic as a material for pharmaceutical plant construction.
5. Explain the construction and working of Swenson – Walker crystallizer.
6. Classify dryers. Discuss about "Drum Dryer".
7. What is Raoult's law? Explain.
8. Define (a) Humid heat (b) Humid volume (c) Humidity.
9. What is the role of protective coatings and linings in the control of corrosion?
10. Write a note on meta filter.
11. Classify crystallizers and add a note on crystal form.
12. Explain the various steps involved in freeze-drying.
13. What is Stefan Boltzmann's equation? Explain.

SHORT ANSWERS

10 x 2 = 20 Marks

14. Define homogenization. Name two homogenizers.
15. What is mean free path? Write the equation for mean free path.
16. What is the composition of stainless steel?
17. List-out two mixing equipments, which handle solids.
18. Suggest a few ways to increase the filtration rate.
19. List-out four objectives of size reduction.
20. What are the additives used in rubber?
21. What is natural convection and forced convection?
22. Define (a) evaporator economy (b) evaporator capacity.
23. List-out the various ways by which size separation is, brought about.
