



Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – NOV 2017

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. What are the factors affecting size reduction? Explain in detail.
2. Explain the rate of drying and discuss the process of freeze drying.
3. What is evaporation? Explain the factors affecting rate of evaporation. Add a note on falling film evaporator.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. What is Mier's theory? What are its limitations?
5. Discuss about the uses of steam distillation.
6. Write a note on belt conveyor.
7. Discuss about the applications of filter aids.
8. Explain the construction and working of spray dryer.
9. Differentiate between single effect evaporation and multiple effect evaporation.
10. Describe the construction and working of Swenson Walker Crystalliser.
11. Explain the construction and working of ball mill.
12. Discuss about the types of glass. Add a note on the evaluation of glass container.
13. Discuss about the principle involved in the working of an air conditioner.

SHORT ANSWERS

10 x 2 = 20 Marks

14. List-out the various ways by which size separation can be carried out.
15. Draw a neat, labeled diagram of sigma blade mixer.
16. Suggest four ways to avoid air pollution.
17. List-out the uses of refrigeration.
18. Classify centrifuges.
19. List-out the problem areas of mixing.
20. How do you avoid the caking of crystals?
21. What is Fourier's law?
22. Define forced and natural convection.
23. Define (a) Black body (b) Gray body.

