

# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – Aug / Sep 2011

**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. Classify industrial filters. Explain the construction and working of a filter press with merits and demerits
2. Discuss on the methods of crystallization. Explain in detail the process of Krystal crystallizer
3. Write about the mechanisms of size reduction. Explain the construction and working of fluid energy mill

### SHORT ESSAYS (Answer any Eight)

**8 x 5 = 40 Marks**

4. Factors affecting drying process
5. Glass, aluminium and rubber as materials of construction
6. Principles of steam distillation
7. Theory of air conditioning
8. Filter aids
9. Working of pneumatic conveyor
10. Working of planetary mixer
11. Working of a fractionating column
12. Working of fluidized bed dryer
13. Determination of humidity

### SHORT ANSWERS

**10 x 2 = 20 Marks**

14. Enumerate prevention and control of corrosion
15. Outline plant location and layout
16. What is azeotrope? Give two examples
17. What are the reasons for vortex formation?
18. Mention the limitations of Meir's super-saturation theory
19. Enumerate Kozeny's equation
20. Define mean free path
21. Give the demerits of ball mills
22. Mention the factors affecting evaporation
23. Give the applications of Fourier's law