Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – JAN-2019

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. Write the principle and constructions, working and advantages of Swenson-walker crystallizer.
2. Discuss the prevention and control of corrosion.
3. Describe mechanism of drying. Explain working and principle of fluidized bed dryer.

SHORT ESSAYS (Answer any Eight)   **8 x 5 = 40 Marks**

4. Explain the theory of refrigeration.
5. Add a note on falling film evaporator.
6. Describe the theory of mixing.
7. Write the factors affecting rate of evaporation.
8. Write the mechanism of filtration.
9. Write a note on Pneumatic conveyor.
10. Describe constructions, working and applications of ball mill.
11. Write a note on material and energy balances.
12. What is conduction? Derive an equation for Fourier's law.
13. Fluid energy mill.

SHORT ANSWERS   **10 x 2 = 20 Marks**

14. Write the advantages of Silverson homogenizer.
15. Filter ads.
16. Applications of freeze drying.
17. Prevention of electrical hazards.
18. Draw and label ball mill.
19. Define humid heat and humid volume.
20. Filter press.
21. Advantages of glass as a material of construction.
22. Supersaturation.
23. Mentions the applications of spray dryer.

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