Rajiv Gandhi University of Health Sciences, Karnataka
III Year B.Pharm Degree Examination – NOVEMBER 2015

Time: Three Hours   **Max. Marks: 70 Marks**

PHARMACEUTICAL ENGINEERING
(Revised Scheme 3)

Q.P. CODE: 2614

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. Describe construction, working, & advantages of plate and frame filter press.

2. Derive Bernoulli's equation. Mention its applications.

3. Classify evaporators. Explain the construction and working of climbing film evaporator.

SHORT ESSAYS (Answer any Six)   **6 x 5 = 30 Marks**

4. Explain Mier's theory of supersaturation. Mention its limitations.

5. Explain the preventive measures for corrosion.

6. Explain mechanisms of size reduction. Give examples of mill for each.

7. Explain the theory of drying.

8. Give the principle and applications of molecular distillation.

9. With neat diagram, explain the construction and working of planetary mixer.

10. What is centrifugation? Derive an equation for centrifugal effect.

11. Describe screw conveyor.

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

12. Explain Stefan – Boltzmann law.

13. What is Reynolds number?

14. Define bound moisture and unbound moisture.

15. Give two reasons and two preventive measures for caking of crystals.

16. What are filter aids? Give two examples.

17. List out the additives used in rubber.

18. Define dry bulb temperature and wet bulb temperature.

19. How can fire hazards be prevented in industries?

20. Draw neat, labeled diagram of Krystal crystallizer.

21. Define sieve diameter.

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