

Rajiv Gandhi University of Health Sciences, Karnataka

Third Semester B. Pharm Degree Examination – 05-Nov-2025

Time: Three Hours

Max. Marks: 75 Marks

PHARMACEUTICAL ENGINEERING

Q.P. CODE: 5012

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

All the questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Define "Size Reduction". What are the factors affecting size reduction? Explain.
OR
Define "Drying". What are the objectives of drying? Name four dryers and explain the construction and working of any one dryer.
2. **Explain the construction, working, advantages and disadvantages of Filter press**

SHORT ESSAYS

7 x 5 = 35 Marks

3. What is Bernoulli's theorem? Mention its applications.
OR
List out the official standards for powders.
4. **Explain the principle and working of Ball Mill**
OR
What are the factors affecting the rate of evaporation? Explain.
5. What is steam distillation? List out its applications.
6. What are filters aids? How are they useful during filtration? Explain its significance and give examples.
7. Explain the construction and working of perforated basket centrifuge.
8. Define 'corrosion'. List out the types of corrosion and their prevention.
9. What are conveyors? Explain about Belt conveyors.

SHORT ANSWERS

10 x 2 = 20 Marks

10. List out the mechanisms of size reduction.
11. Differentiate between propellers, paddles and turbines.
12. What is Fourier's law?
13. Differentiate between drying and evaporation.
14. Define "Equilibrium Moisture".
15. How do you prepare water for injection?
16. Draw a neat labeled diagram of filter leaf.
17. List out the applications of centrifugation.
18. **State Raoult's Law**
19. **Define Black Body and Grey Body**
