

# Rajiv Gandhi University of Health Sciences, Karnataka

## Third Semester B. Pharm Degree Examination – 17-Nov-2021

**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. Describe the principle, construction, working, advantages and disadvantages of ball mill.

**OR**

Define Distillation. Explain the principle and working of Flash distillation

2. Define Drying. Discuss the theory of drying with respect to rate relationship.

#### **SHORT ESSAYS**

**7 x 5 = 35 Marks**

3. Explain principle and working of Venturimeter.

**OR**

Explain principle and working of Bag filters.

4. Derive Fourier's law and write its applications.

**OR**

Explain the construction and working of steam jacketed kettle.

5. Describe the construction and working of a Silverson emulsifier.
6. Describe the construction and working of a leaf filter.
7. Explain the construction and working of a basket centrifuge.
8. Define and classify corrosion.
9. Classify the materials of plant construction. Explain the uses of non-ferrous metals.

#### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

10. Give different types of monometer.
11. Name one mill each for the size reduction of fibrous and hard material.
12. Define black body and grey body.
13. Write the applications of multiple effect evaporators.
14. What are Impellers?
15. Recommend a suitable dryer for drying the
  - a) Thermolabile substances
  - b) Milk
16. Distinguish between Drying and Evaporation.
17. List two pharmaceutical applications of Rubber.
18. What is biological corrosion? Give an example.
19. Write the uses of Pneumatic conveyor.

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