

Rajiv Gandhi University of Health Sciences, Karnataka III Year B.Pharm Degree Examination – 10-Jan-2020

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)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Define Evaporation. Discuss the principle and working of Film evaporators.
- 2. Define Distillation. Discuss the principle and working of Steam distillation.
- 3. Discuss the theory of drying. Explain the working of Freeze dryer with its applications.

SHORT ESSAYS (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. Discuss the principle of Hammer mill.
- 5. Discuss the working of Cyclone separator.
- 6. Explain about Silverson mixer
- 7. Discuss the principle of Swenson walker crystallizer.
- 8. Explain about venture meter.
- 9. Explain about prevention of corrosion.
- 10. Explain principle of Multiple effect evaporator.
- 11. Discuss about Meta filter.

SHORT ANSWERS

 $10 \times 2 = 20 \text{ Marks}$

- Uses of Vacuum crystallizer
- 13. Define size separation. Write its application.
- 14. Define Supersaturation.
- 15. Uses of glass as a plant material
- 16. Define bound and unbound water.
- 17. Prevention of Vortex formation
- 18. Uses of CYcloidal formation
- 19. Applications of chain conveyor
- 20. Define Sieve number with example.
- 21. State Fourier's law.
