Rajiv Gandhi University of Health Sciences, Karnataka
Third Semester B. Pharm Degree Examination – 23-Nov-2022

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 'Mixing'. What is the importance of mixing in pharmacy? Name the mixers used for semisolids and explain the construction and working of anyone.
   OR
   What is 'Evaporation'? How is it different from 'drying' and 'distillation'? Discuss the various factors affecting evaporation rate.

2. Explain the theory of stem distillation. What are its applications?

SHORT ESSAYS **7 x 5 = 35 Marks**

3. Explain the working of 'Rotameter'. List out its merits and demerits.
   OR
   Explain the construction and working of planetary mixer.

4. Draw a neat labelled diagram of climbing film evaporators and explain its working.
   OR
   Explain the modes of heat flow.

5. Classify dryers and explain the working of tray dryers.

6. Describe the working of plate and frame filter.

7. Classify centrifuges. Draw a neat labelled diagram of super centrifuge.

8. What are the sources of pollution in the pharmaceutical industry? Suggest remedial measures for the same.

9. Define and classify corrosion and prevention methods.

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

10. What is Kick's law?

11. What are manometers? Give examples.

12. Distinguish filtration and clarification.

13. What is evaporator economy?

14. Mention the official standard powders.

15. Mention the uses of rotary drum filters.

16. List out the applications of membrane filter.

17. What is centrifugal effect?

18. What are impellers. Write the use of Silverson mixers.

19. List out the applications of belt conveyors.

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