

## Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B. Pharm Degree Examination - 17-Jan-2020

Time: Three Hours Max. Marks: 80 Marks

# ADVANCED INDUSTRIAL PHARMACY (Revised Scheme - 2) O.P. CODE: 1971

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. Enumerate factors affecting protein binding of drugs with examples.
- 2. What are liposomes? Explain their concept, merits, demerits and applications.
- 3. Define pilot plant. List out its objectives and explain general considerations during pilot plant scale up studies.

### SHORT ESSAYS (Answer any Eight)

 $8 \times 5 = 40 \text{ Marks}$ 

- 4. Write short note on blood proteins to which drug bind.
- 5. Write a note on absorption of solid dosage forms.
- 6. Importance of in-vitro in-vivo correlation
- 7. Explain the methods of in-vitro evaluation of controlled drug delivery systems.
- 8. List-out various factors that affect dissolution.
- 9. Explain phase-I biotransformation with examples.
- 10. What is process validation? Explain its salient features.
- 11. Explain the concept and mechanism of renal clearance.
- 12. Explain the various approaches to increase the bioavailability of a drug.
- 13. Explain two methods for calculating K<sub>e</sub> from urinary excretion data.

#### SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 14. List any four polymeric materials used in matrix tablet.
- 15. Give the advantages of implants.
- 16. Mention the application of nanoparticles.
- 17. What is first pass effect?
- 18. Define Flip-flop phenomenon.
- 19. Define biliary excretion.
- 20. Write a note on ion exchange resin-drug complexes.
- 21. Mention advantages of Microencapsulation.
- 22. Name four marketed herbal toothpastes.
- 23. Applications of pharmacokinetic models

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