

Reg. No

Name

M Sc DEGREE END SEMESTER EXAMINATION - MARCH 2020
SEMESTER 4 : PHARMACEUTICAL CHEMISTRY
COURSE : 16P4CPHT14EL ; PHARMACEUTICAL CHEMISTRY - III
(For Regular - 2018 Admission and Supplementary - 2017, 2016 Admissions)

Time : Three Hours

Max. Marks: 75

Section A

Answer any 10 (2 marks each)

1. What is the effect of pH on the dissolution rate ?
2. What do you mean by dissolution and diffusion controlled drug release systems?
3. Give the uses of Iodine -131 as a radiopharmaceutical
4. What is SPET
5. What is the base for suppository. Give an example
6. Explain one advantage of tablets being enteric coated?
7. What are the entitlement of a work to copyright?
8. What do you mean by double blind study in clinical trials?
9. What are the types of suspension?
10. Give the types of emulsion?
11. What are micelles?
12. Explain the principle of separation of different components by liquid chromatography?
13. What is the effect of using solvent mixtures of different compositions in LC.

(2 x 10 = 20)

Section B

Answer any 5 (5 marks each)

14. Give an account of the effect of drug solubility and particle size on drug dissolution.
15. Give an account of the chemical modifications used for increasing the solubility of a drug?
16. Explain the process of drying and sugar coating of tablets
17. Explain the factors to improve physical stability of emulsions?
18. Write a note on properties of colloids?
19. Explain the preparation of an o/w and w/o emulsion
20. Explain any one parenteral dosage forms
21. How is a nanoparticle drug delivery system designed?

(5 x 5 = 25)

Section C**Answer any 2 (15 marks each)**

22. Describe the working of counter current extractor and multiple evaporator.
23. Discuss the process and technique for the manufacture of tablet?
24. Explain briefly about complete specification of a patent.
25. a) Give the principle and working of a GCMS. What is the advantage of GCMS over GC? What are the applications in Pharmaceutical Industry?
b) Explain the principle of separation and the applications of gel electrophoresis. (8 + 7)

(15 x 2 = 30)