

Reg. No

Name

23P4018

M. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023
SEMESTER 4 : PHARMACEUTICAL CHEMISTRY
COURSE : 21P4CPHT14EL : ADVANCES IN PHARMACEUTICAL OPERATIONS
(For Regular - 2021 Admission)

Duration : Three Hours

Max. Weights: 30

PART A

Answer any 8 questions

Weight: 1

1. Explain one advantage of tablets being enteric coated? (E, CO 2)
2. What do you mean by double blind study in clinical trials? (U, CO 4)
3. Give an account of USP (U, CO 4)
4. What is the significance of He purging in HPLC? (R, CO 5)
5. Explain the principle of fractional distillation. (U, CO 5)
6. Give an account of I.P (U, CO 4)
7. What are the additive for drugs filled in capsules? (U)
8. What is HLB scale? (R)
9. What is ELISA? (R, CO 5)
10. What are the factors affecting the dissolution of a drug (U, CO 2)
(1 x 8 = 8)

PART B

Answer any 6 questions

Weights: 2

11. Explain the factors affecting disintegration of a tablet? (An, CO 2)
12. What do you mean by controlled flocculation? (U)
13. Give an account of distillation under reduced pressure (U, CO 5)
14. Give an account of SPET (R, CO 5)
15. Give an account of phase II clinical trial (U, CO 4)
16. What are vaginal capsules? How do they act ? (E, CO 2)
17. Give an account of copyrights (U, CO 4)
18. Explain the preparation of an o/w and w/o emulsion (U)
(2 x 6 = 12)

PART C

Answer any 2 questions

Weights: 5

19. a) Briefly explain the principle of separation of compounds by gel permeation chromatography. Describe the various parts of the system and the column packing material. What are the advantage and disadvantage of this technique? b)What is the principle of HPLC? Why it is superior to conventional LC? (U, CO 5)
20. Write a detailed description on different coating techniques in tablets? (E, CO 2)

21. Classify drug delivery systems based on its technical sophistications (U, CO 1, CO 4)
22. Give an account of drug release mechanisms (U, CO 2)
(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Describe the drug delivery systems and pharmaceutical dosage forms.	U	21	5
CO 2	Explain preformulation studies and stability testing of drugs.	R	1, 10, 11, 16, 20, 22	16
CO 4	Describe the principles of forensic pharmacy.	R	2, 3, 6, 15, 17, 21	12
CO 5	Explain different methods of extraction and application of radiopharmaceuticals.	R	4, 5, 9, 13, 14, 19	12

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;