

Council for Technical Education and Vocational Training
Office of the Controller of Examinations
Sanothimi, Bhaktapur

Regular Exam - 2080 Mangsir/Poush (Scholarship)

Program: Diploma in Pharmacy **Full Marks: 80**
Year/Part: Second (2021) **Pass Marks: 32**
Subject: Pharmaceutics I **Time: 3 hrs.**

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Group 'A' (Very Short Question)

Attempt any TWELVE questions.

[12×2=24]

21. Define:

a. Tablet

b. Syrup

c. Cream

d. Aerosol

22. Write any two difference between hard gelatin and soft gelatin capsule with example.

23. Define drying. List the factors affecting drying.

24. Define evaporation. Write any four pharmaceutical application of evaporation.

5. Define azeotropic distillation.

6. Define buffer capacity.

7. Define colloids. Write two applications of colloids.

1-8. Define rheology. Classify fluids on basis of flow properties.

2-9. Write about the plasma concentration time curve of IV infusion.

1-10. Define loading dose and maintenance dose.

11. Define contact angle.

2-12. Define and classify compendia.

2-13. Define bioequivalence.

14. A solution contains 8% v/v of ethanol, calculate amount of ethanol to make 650 ml of 8% v/v solution.

Group 'B' (Short Question)

Attempt any EIGHT questions.

[8×4=32]

15. Describe history of pharmacy education, industry and organization in Nepal.

16. List the pharmacopoeia recognized in Nepal. Write in brief about IP (Indian Pharmacopoeia).

Cont.

- ✓ 17. Define milling. Write about its principle. 3
- ✓ 18. Define distillation. Write about steam distillation. 3
19. How can you determine viscosity by using Ostwald U-tube viscometer? 2
20. Classify the powder as per pharmacopoeia.
21. Define biopharmaceutics. Write about biopharmaceutics system of classification (BCS) of drugs.
- ✓ 22. Define surfactants. Classify it with example. 3
23. Define filtration. Explain about sintered glass filter.
24. A doctor prescribes cefpodoxime 100 mg/5 ml for two times a day for 5 days. In pharmacy you have 30 ml of day syrup is available. How many bottle should dispensed for full course of drugs to be taken?

Group 'C' (Long Question)

Attempt any THREE questions.

[3×8=24]

- ✓ 25. Define bioavailability. Describe about the different transport mechanism of drug across GIT. 4
- ✓ 26. Define solubility. Explain about factors affecting solubility. 5
- ✓ 27. Define monophasic liquid dosage form. Write about the components used during formulation of monophasic liquid dosage form. Describe the preparation of syrups. 5
28. Write the principle, construction, working and application of equipment: (any TWO)
 - a. Hammer mill
 - b. Fluidized bed dryer
 - c. Triple roller mill
 - d. Stalagnometer

Good Luck!