

Code No: R7404

JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY HYDERABAD

B. Pharmacy III year - I-Sem.- I Mid – Term Examinations, Aug/Sept. – 2009

PHARMACEUTICAL TECHNOLOGY-I

Descriptive Exam – Question Bank

Unit - I

1. How following parameters effects the bioavailability of drug
 - a. particle size
 - b. wetting
 - c.density
 - d. solubility
2. Define hydrolysis with example. Which factors increases the hydrolysis and how can prevent it.
3. Differentiate oxidation- reduction . Give one example . How can prevent them.
4. How recemization affects the bioavailability of drug. Explain
5. How polymerization affects stability and formulation of drug. Explain.
6. Define prodrug and write its applications.
7. What are the pharmacokinetic applications of prodrugs.
8. Write ideal prodrug properties and write its limitations.
9. Name , define and compare the two categories of prodrugs.
10. What is meant by stability testing. How it can be performed for finished product.
11. Write ICH guidelines for finished product testing.
- 12 Write short note on
 - a. Dissolution
 - b. Oxidation
13. How dielectric constant and organoleptic properties affects the bioavailability of drug.
14. Write the principle for hydrolysis with two examples and how it affects the stability of drug.
15. How formulation of solid dosage forms affected by oxidation.

UNIT-II

16. Classify the different vehicles. Explain them with examples.
17. What is meant by non-aqueous vehicles and hydroxylated compounds. Explain with examples.
18. Where the stabilizers are used. Write their classification with examples.
19. Write short note on
 - a. Synergists
 - b. Preservatives.
20. What are different organoleptic additives , explain them with examples .
21. What are the different solubility enhancement procedures adopted in pharmaceutical dosage forms . explain briefly.
22. What are the different liquid formulations for internal use . write their formulation additives.
23. What are the different liquid formulations for external use . write their formulation additives.
24. Classify the emulsifying agents . write two examples each class.
25. Classify the suspending agents . write two examples each class.
26. Write the formulation of emulsions.
27. What are the stability problems associated with emulsions . How can correct them.
28. Write the evaluation of emulsions.

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29. Write the formulation of suspensions.
30. Differentiate flocculating and non-flocculating systems.
31. Write the evaluation of suspensions.
32. Classify the suspending agents with one examples.
33. Write the evaluation of clear liquids.

UNIT-III

34. Define the following
 - a. Epidermatic
 - b. Endodermatic
 - c. Diadermatic
 - d. Ointment
 - e. paste.
35. Write the mechanism of drug penetration and factors affecting drug penetration.
36. What are different semi-solid bases. Explain with two examples.
37. How the selection of bases are done.
38. Write the general formulation of semi-solids.
39. What are the special types ointments.
40. Write the evaluation of ointments.
41. Differentiate ointments, pastes and creams and write their identification tests.
42. What is clear gel manufacturing procedures. Write in detail.
43. Write the evaluation for packaging for semi –solids.
44. Write the different methods of ointments preparation.
45. Write the different methods of pastes preparation.
46. Write the different methods of creams preparation.
47. Enumerate different ointment bases.
48. Write the evaluation of ointments.

UNIT-IV

49. Write formulation of aerosols.
50. Classify propellants with examples and write ideal properties of propellants.
51. What are the different components used in aerosol packaging.
52. How the aerosols are prepared.
53. Write the pharmaceutical applications of aerosols.
54. What are the quality control test for pharmaceutical aerosols.
55. Enumerate filling procedures for aerosols.
56. Write the stability aspects of pharmaceutical aerosols.
57. How the selection components are done for aerosols.
58. What are the different types components used in aerosols.
59. Write short note on
 - a. actuators
 - b. valves.
60. Write short note on
 - a. propellants
 - b. evaluation of aerosols.

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