T.Y.B.Sc.
Pharmaceutical Chemistry
QUESTION BANK

1. Name of Topic :Pharmaceutical Chemistry

2. Name of Unit : Unit 1,2,3 and 4
3.Name of Paper : Pharmaceutical Chemistry and dyestuff chemistry
4.Class : TY BSc
5. Name of Faculty member: Dr Anita S.Goswami-Giri
Mr. Ajit Bhumkar
Mrs. Sunita Waghmare-Mahale

Unit I

1. What is drug? How are drugs classified on the basis of their therapeutic action?
2. What do you mean by spurious drugs? What do you mean by spurious drugs?
3. Write a note on nomenclature of drugs.
4. Explain the drug –receptor interaction with suitable examples and its importance.
5. Write the synthesis and use of paracetamol.
6. What is Bioavailability? Discuss factors affecting bioavailability.
7. What are the different dosages forms in which drugs can be administered?
8. Write a note on pharmacopoeia
9. Define (i) Pharmacon (ii) Pharmachophore (iii)Prodrug (iv) Half life efficiency
10. (v) LD_{50} (vi) ED_{50} (vii) Therapeutic index
11. What are drugs? What are the requirements of an ideal drug?
12. Give the synthesis and uses of Tramadol drugs.
13. Write a note on antipyretic.
14. Write classification of CNS drugs.
15. Write a note on drug potency.
16. Explain (i) Drug toxicity (ii) Drug addiction
    a. (iii) Misbranded drugs (iv) Adulteratyed drug
17. Explain factors governing the choice of route.
18. Write a note on formulation and different dosage forms.
19. Explain sustain release formulation.

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Unit II

20. What are non-steroidal anti-inflammatory agents? Discuss its classification.
21. What are the physiological effects produced by histaminerelease?
22. Give the structure, uses and side effects of Chlorpheniramine Maleate.
23. Give the synthesis and uses offurosemide.
24. What are the different types ofdiabetes?
25. Give the synthesis and uses ofatenolol.
26. Write short note on Diuretics and Antihypertensive drugs.
27. Give the synthesis, uses and side effects oflevodopa.
28. Draw the structure ofHistidine.
29. Give the synthesis, uses and side effects of salbutamol.
30. What are antihistamines drugs? Explain it in details.
31. Write the structure and uses of Atenolol.
32. What is inflammation? Explain it in details with itscauses.
33. Give the structure, uses and side effects of Mefanamicacid.
34. Give the synthesis and uses of cetirizine.
35. Give the synthesis ofatenolol.
36. Give the draw backs of insulintherapy.
37. Give the synthesis, uses and side effects of levo-dopa.
38. What is diabetes mellitus? Write symptoms and types of it in details.

UNIT III

39. Give the characteristic and properties of Antibiotics.
40. Give the structure and side effects of Amoxicillin.
42. Give the synthesis of Paludrine.
43. Give the synthesis of Ciprofloxacin.
44. Explain combination therapy with one example.
45. Give the synthesis of Pyrimethamine and write its uses.
46. Give the uses and side effect of Albendazole.

47. Explain the following routes through which drugs areExcreated.

49. Renal excretion (b) Biliary excretion (c) Through lungs
50. Give the synthesis of Albendazole.
51. Give the uses of Dimethyl carbamazine citrate.
52. Give the symptoms of malaria .
53. Give the structure and side effect of 4-amino quninolines.
54. Give the side effect and uses of Gentamycin.
55. Give the important uses of antibiotics.
56. Explain oxidation reaction in Phase I.
57. Write a note on drug distribution.
58. Write a note on SAR in benzodiazepin.
59. Explain skin excretion of the drugs.
60. Write a note on anti cancer agents.
61. Write a note on SAR Sulphonamide .
62. Write a note on discovery of lead compound
63. Write a note on anti infective agent.
64. Explain structure modification to increase potency (i) Homologation (ii)Chain branching
65. (iii) Ring-chain transformation (iv) Extension of the structure
66. Write a note on CNS agent.
67. Computer assisted drug design (i) Ligand based molecular design
    a. (ii) Receptor baased molecular design.
68. Explain development of drug on the basis of (a) Pharmachophore identification
    i. (b)Functional group modification
    ii. (c) Structure-Activity relationship

UNIT IV

69. What are the characteristics of anti-tubercular drugs?
70. What is tuberculosis ? Write its symptoms.
71. Write a note on Streptomycine**.**
72. What is Leprosy and what are different forms of Leprosy.

73. Give synthesis and uses of Metronidazole.
74. Write synthesis and uses of Ethambutol .
75. What is Amoebiasis ? Discuss the types of Amoebiasis**.**
76. Write a note on Ornidazole.
77. Write the characteristics of ideal Amoebicide.
78. Write a note on Ornidazole.
79. What is tuberculosis ? Write the symptoms of tuberculosis.
80. Write a note on Iso nicotinyl hydrazide.
81. Write the synthesis and uses of Metronidazole.
82. Write the characteristics of ideal Anti-TB drugs.
83. What is leprosy? What are the different forms of leprosy?
84. Write the synthesis and uses of Ethambutol.
85. Write a note on Dapsone.

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