

QUESTION BANK SEM VIII (CBCS)
HK COLLEGE OF PHARMACY
PHARMACEUTICAL CHEMISTRY LAB-II
EXAMINATION DATE: 19th and 20th 2020

1. What is Benzylic Acid rearrangement?
2. Difference between green and conventional method for the synthesis of Benzilic Acid?
3. Advantages of green chemistry over conventional methods of synthesis
4. Give an example of a synthesis involving 1,2-aryl shift
5. What are the reagents used in synthesis of Benzilic acid?
6. Why the use of alcohol is prevented in the green method for synthesis of Benzilic acid
7. What is the product obtained when 1,2-diphenyl 1,2-dioxoethane when treated with aqueous KOH?
8. List the disadvantages of conventional method for synthesis of Dihydropyrimidinone
9. List the advantages of green method for synthesis of Dihydropyrimidinone.
10. What is the name reaction involved for synthesis of Dihydropyrimidinone.
11. Give the components for Biginelli reaction
12. What is the name reaction involved for synthesis of Anthranilic acid?
13. Give the components for Hoffmann Bromide degradation
14. Name the reaction involved in conversion of amide to a primary amine using sodium hypobromide solution.
15. Why temperature is maintained below 0°C during the synthesis of anthranilic acid?
16. Which synthesis you have performed in the laboratory that involves isocyanate as an intermediate?
17. What is reduction reaction? Give an example? Addition of Hydrogen or removal of oxygen
18. How do you convert p-Nitrobenzoic acid to p-aminobenzoic acid?
19. What is the use of celite in the synthesis of PABA?_
20. Name the reaction involved in synthesis of anthranilic acid?
21. Name the reaction involved in conversion of amide to a primary amine using sodium hypobromide solution?
22. What is recrystallization?
23. When benzil is reacted with urea in presence of alkali and ethanol, what is the product formed?
24. When benzil is reacted with urea in presence of alkali and ethanol, what is the name of the reaction?
25. Give example of cyclization reaction?
26. Acetoacetanilide when reacted with con. H₂SO₄ at about 70-75°C, name the product obtained and reaction involved?
27. What is the best technique currently available for the purification of any compound.
28. What is the application of TLC?
29. What is benzoin condensation?

30. How will you convert benzoin into benzilic acid?
31. What is pechmann condensation? Give an example?
32. Give an example of is pechmann condensation?
33. Name the chemicals and reagents used in the synthesis of Rasaetophenone?
34. What do you mean by activated charcoal?
35. What is the use of activated charcoal in recrystallization?
36. Define melting point
37. Define boiling point
38. How the progress of the chemical reaction is monitored in the laboratory?
39. What is reacted with glycine to get hippuric acid?
40. How hippuric acid is purified?
41. Use of Carbon tetrachloride in the synthesis of hippuric acid?
42. Which are the two synthesis that involve the use of beta-ketoester?
43. What is a catalyst? Is Conc H₂SO₄ termed as a catalyst or a reagent in the synthesis of 4-methyl carbostyryl
44. What are the reagents and chemicals involved in the synthesis of 7-Hydroxy-4-methylcoumarin?
45. What is the iupac name of 4-methyl carbostyryl
46. What is the boiling point of Liquid paraffin?
47. What do you mean by low boiling liquids?
48. Temperature when water is warmed
49. Temperature when water is Heat
50. Water to be Temperature when water is warmed boiled
51. Name an amino acid used in the synthesis of hippuric acid?
52. Name the reducing agent used in the synthesis of PABA?
53. Name the reducing agent used in the synthesis of PABA other than Powdered tin?
54. What is Conc NH₃ solution?
55. Give one example of organic acid?
56. What do you understand mineral acids?
57. Why are they called mineral acids?
58. Give one example of mineral acid?
59. Reagents and chemicals used in the synthesis of phenytoin?
60. What is the difference between ethyl alcohol and absolute alcohol?
61. In the synthesis of benzylic acid, a mixture of KOH, rectified spirit, water and benzil in required quantities is to be heated on water-bath for 12-20 min. Instead if the mixture is boiled, what can be the product?
62. Resorcinol is used as a reactant in which of the synthesis in your lab?
63. Urea is used as a reactant in which of the synthesis in your lab?
64. What is the iupac name of Phenytoin?
65. What is the specific gravity of Conc ammonia solution used in PABA?
66. Name the filter aid used in the synthesis of PABA?
67. Write the TLC system developed in the lab to synthesize 4-Methyl Carbostyryl?
68. Give the approx. melting point of PABA?
69. How is acetoacetanilide prepared?
70. Write the structure of acetoacetanilide?

71. Write the structure of Resacetophenone,
72. Write the structure of 5,5'-Diphenylhydantoin,
73. Write the structure of Hippuric acid
74. Write the structure of Benzilic acid
75. Write the structure of 4-Methyl Carbostyryl
76. Write the structure of PABA
77. Write the structure of 7-Hydroxy-4-methyl coumarin
78. Write the structure of Benzil
79. Write the structure of Anthranilic acid
80. Write the structure of Phthalimide
81. Write the structure of Urea
82. Write the structure of Ethylacetoacetate
83. Write the structure of Resorcinol
84. Write the structure of Dihydropyrimidinone
85. How do you characterize any synthesized product?
86. Significance of refluxing?
87. Give an example of alpha hydroxy carboxylic acid you have prepared in the lab.
88. Difference between reflux and distillation?
89. How do you set up reflux assembly?
90. What precautions need to be taken when you carry out recrystallisation using alcohol?
91. What is the principle of recrystallization?
92. What are the steps of recrystallization?
93. Why does recrystallization reduce yield?
94. Why is it important to cool the solution slowly during recrystallization?
95. What are the common problems associated with benzoyl chloride?
96. What happens if too much water/dilute solvent during recrystallization?
97. What is redox reaction?
98. What is the chemistry of flame?
99. If toluene is oxidized, what is the product?
100. If phenol is brominated, what is the product?