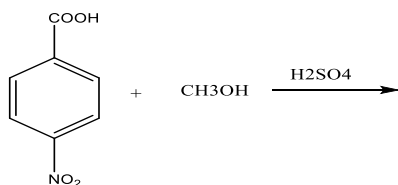


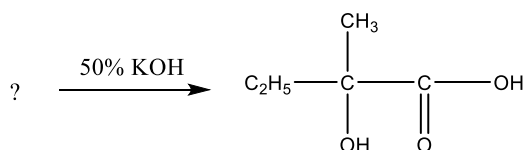
BPH_C_803_L_Pharmaceutical chemistry Lab-II

Question Bank

1. Write detail mechanism for synthesis of phenytoin from benzil.
2. Write a scheme for conversion of p-nitrobenzoic acid to p-aminobenzoic acid.
3. Explain use of conc. HCl in isolation of anthranilic acid
4. Explain use of glacial acetic acid in isolation of anthranilic acid.
- 5.

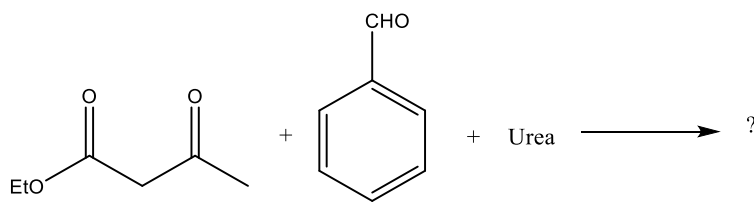


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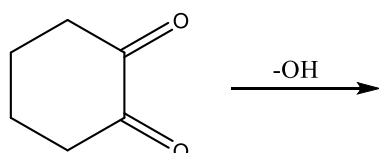


7. What is importance of Hoffmann degradation

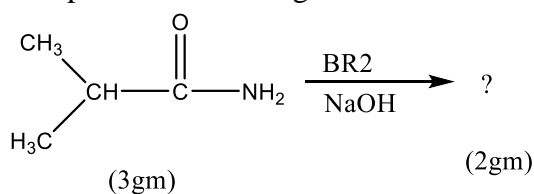
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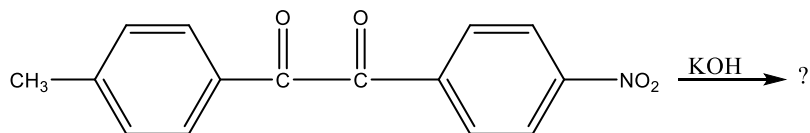


10. Complete the following reaction and calculate % yield

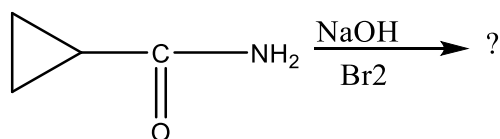


11. Give any two examples of two reducing agent with reaction

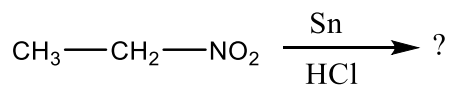
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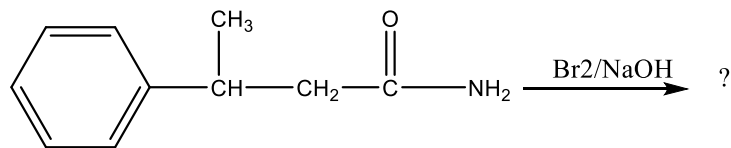


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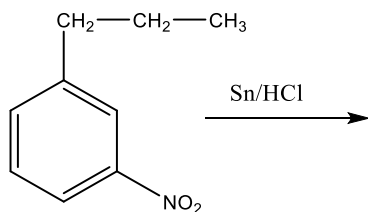


15. Explain principle of atom economy with appropriate example

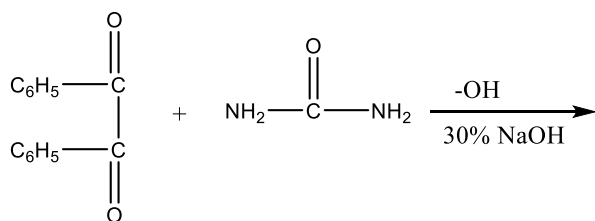
16. Predict the following product



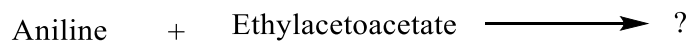
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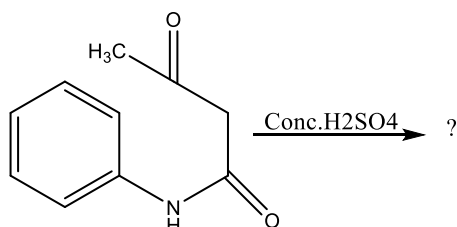
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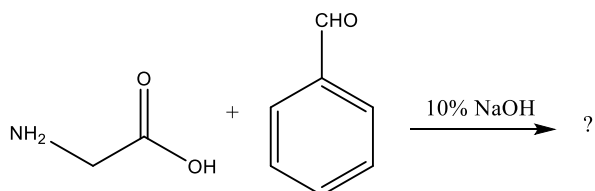


20.



21. Explain the principle of Knorr-pyrroline synthesis

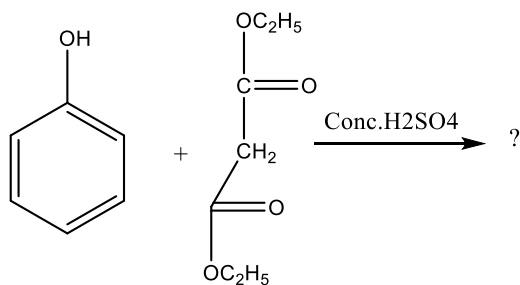
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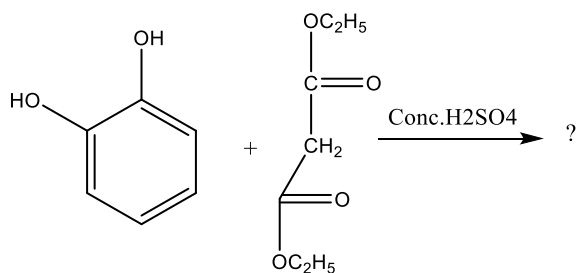
23. What is meaning of "Dissolve metal reduction"?

24. Why strong base is used in synthesis of benzoyl glycine?

25.

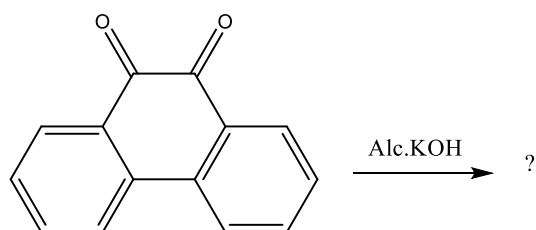


26.



27. Give example of symmetrical and asymmetrical ketone.

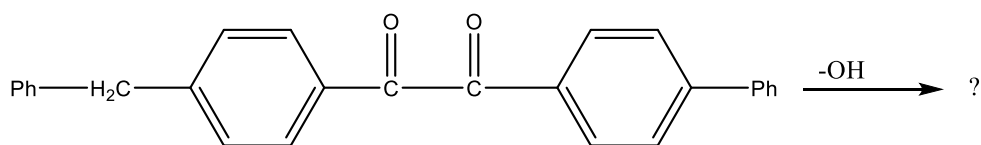
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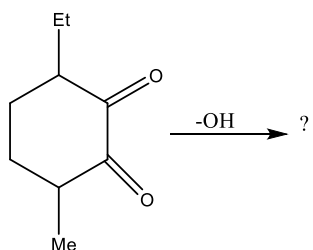
29. What is difference between cannizzaro reaction and benzylic acid rearrangement

30. What will be possible reaction in presence of alc. KOH , if diketone will be having α -hydrogen atom.

31.



32.



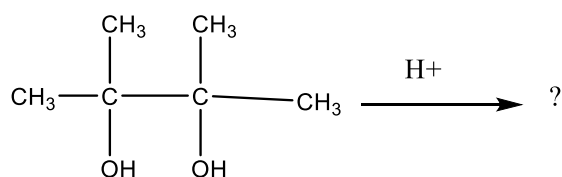
33. Why benzylic acid rearrangement also called redox reaction?

34. What is pinacol-pinacolone rearrangement?

35. Give examples of pinacol

36. Why tertiary carbocation does not undergo pinacol-pinacolone rearrangement?

37.



38. How pinacol get converted into pinacolone?

39. Why synthesis of anthranilic acid is not possible by reduction o-nitrobenzoic acid?

40. Why only one unit of bromine is used in synthesis of anthranilic acid?

41. Write balancing reaction of tin and Conc. HCl in presence of Nitrobenzene

42. Why ketone should be beta position to ester for synthesis of dihydropyrimidinone?

43. What is importance of biginelli reaction?

44. What is use of dihydropyrimidinone?

45. Why synthesis of Anthranilic acid is carried out in cold condition?

46. What is difference between skraup synthesis and Knorr-pyrroline synthesis?

47. What is mechanism for synthesis of hippuric acid?

48. How glycine is act as nucleophile instead of base in synthesis of Hippuric acid?

49. Give example and principle of cyclization reaction?

50. Give examples of β -keto ester

51. How coumarin can be purified?

52. What is 1,2-nucleophilic shift?

53. Give examples of migratory group?

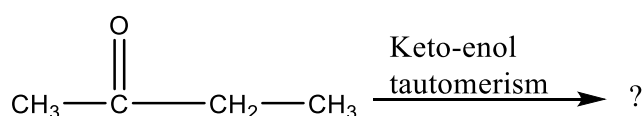
54. Give examples of exothermic reaction?

55. Give examples of endothermic reaction?

56. How PABA can be separated from tin oxide?

57. How much mole of tin is required to react with acid to release proton?

58.



59. What is importance of Pechmann condensation?

60. What is difference between Green chemistry method and conventional method?

61. What are advantages of synthesis of benzilic acid by green chemistry over conventional method?

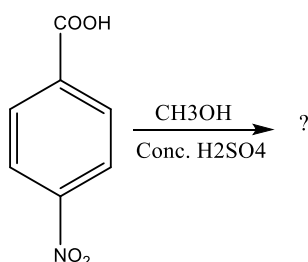
62. Give advantages of green chemistry method over conventional method?

63. Why concentrated ammonia is added in synthesis of PABA?

64. What is atom economy of benzilic acid from benzil?

65. Why limit amount of hydroxide is added in synthesis of Hippuric acid?

66.

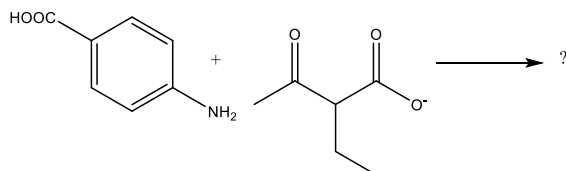


67. Calculate amount of P-nitrobenzoic acid used in synthesis of P-aminobenzoic acid obtained 3gm.

68. What is use of phenytoin?

69. What is migratory aptitude?

70.



71. Which intermediate carbocation is more stable in pinacol pinacolone rearrangement?

72. Which side product can be formed in synthesis of phenytoin?

73. Which medium is used in synthesis of Benzilic acid rearrangement reaction?

74. What is Benzilic acid used for?

75. Is benzil is strong acid?

76. Why does benzilic acid only precipitate in acidic solution?

77. Draw the structure of the carboxylate potassium salt intermediate in the synthesis of benzilic acid?

78. Calculate theoretical yield of benzilic acid from benzil?

79. What is pinacol in organic chemistry?

80. Which intermediate is formed during pinacol-pinacolone rearrangement?

81. Which will not give Hoffmann bromoamide reaction?

82. Which intermediate is formed in Hoffmann bromoamide reaction?

83. What is coumarin?

84. Which intermediate is formed in synthesis of pyrimidinone?

85. Draw structure of 5'-5'-diphenyl hydantoin

86. What is hypohalide solution?

87. What is difference between aldol condensation and benzilic acid rearrangement

88. Give example of α -hydroxy acid

89. Why there is 1,2-phenyl shift in synthesis of phenytoin?

90. Write mechanism of Biginelli reaction

91. Which is more acidic para amino benzoic acid or para nitrobenzoic acid

92. Which is limiting reagent in synthesis of glycine

93. Give examples of amide with mechanism

94. Why benzoic acid is converted into benzoyl chloride in synthesis of benzoyl glycine?

95. Why stronger base is used as compared to glycine in synthesis of hippuric acid?

96. What is difference between knorr pyrroline synthesis and skraup synthesis

97. Give example of acidic intramolecular cyclisation reaction

98. Draw structure of 3,4-dihydropyrimidinone-2(H)-one.

99. Why glacial acetic acid is added at the end in synthesis of PABA?

100.

