Date Planned : __ / __ / __	Daily Tutorial Sheet-3	Expected Duration : 30 Min
Actual Date of Attempt : __ / __ / __	Level-1	Exact Duration :_____

31. Phenol is heated with a solution of mixture of KBr and $KBrO_3$ in presence of HCl. The major product obtained in the above reaction is :

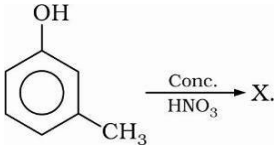
(A) 2-Bromophenol **(B)** 3-Bromophenol

(C) 4-Bromophenol **(D)** 2, 4, 6-Tribromophenol

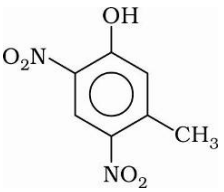
32. To distinguish between salicylic acid and phenol one can use :

(A) $NaHCO_3$ solution **(B)** 5% NaOH solution

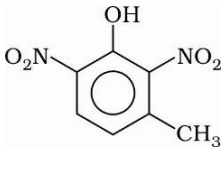
(C) neutral $FeCl_3$ **(D)** bromine water

33. In the reaction for dinitration 

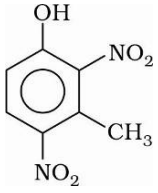
X. The major di-nitrated product X is :



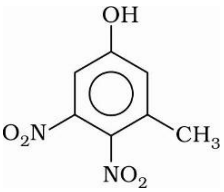
(A)



(B)



(C)



(D)

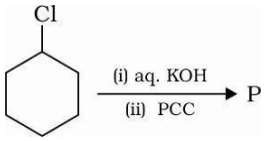
34. An organic compound 'X' with molecular formula, C_7H_8O is insoluble in aqueous $NaHCO_3$ but dissolves in NaOH. When treated with bromine water, 'X' rapidly gives 'Y' with molecular formula $C_7H_5OBr_3$. The compounds 'X' and 'Y' respectively, are :

(A) Benzyl alcohol and 2, 4, 6-Tribromo-3-methoxybenzene

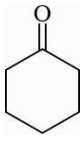
(B) Benzyl alcohol and 2, 4, 6-Tribromo-3-methylphenol

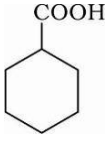
(C) *m*-cresol and 2, 4, 6-Tribromo-3-methylphenol

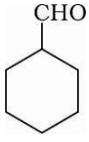
(D) Methoxybenzene and 2, 4, 6-Tribromo-3-methoxybenzene

35. 

P is :

(A) 

(B) 

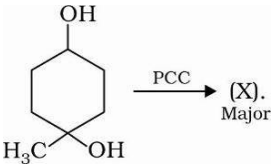
(C) 

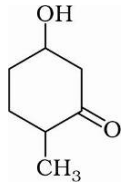
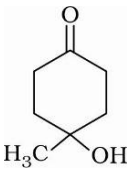
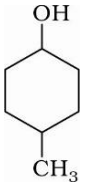
(D) 

36. Which of the following compound would not evolve CO_2 when treated with $NaHCO_3$ solution ?

(A) Salicylic acid **(B)** Phenol

(C) Benzoic acid **(D)** 4-Nitrobenzoic acid

37.  (X). The major product of the given reaction is :

(A)  **(B)**  **(C)**  **(D)** 

38. Phenol is more acidic than alcohol because :

(A) phenol is more soluble in polar solvents **(B)** alcohol does not loose hydrogen atom

(C) phenoxide ion is stabilised by resonance **(D)** phenoxide ion doesn't exhibit resonance

39. When benzene sulphonic acid and *p*-nitrophenol are treated with $NaHCO_3$, the gases released respectively are :

(A) SO_2, NO_2 **(B)** SO_2, NO **(C)** SO_2, CO_2 **(D)** CO_2, CO_2

40. Which one of the following compounds will not react with CH_3MgBr ?

(A) Ethylacetate **(B)** Acetone **(C)** Dimethylether **(D)** Ethanol

41. The boiling point of ethanol (molecular weight = 46) is 78°C, what can be the boiling point of diethyl ether? (Molecular weight = 74)

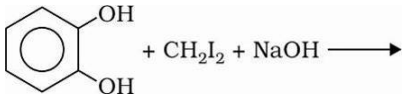
(A) 100°C **(B)** 78°C **(C)** 86°C **(D)** 34°C

42. The products obtained when Benzyl phenyl ether is heated with HI in the mole ratio 1 : 1 are :

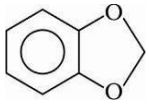
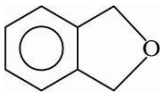
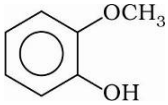
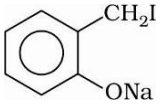
1. Phenol **2.** Benzyl alcohol **3.** Benzyl iodide **4.** Iodobenzene

The correct choice is :

(A) 1 and 3 only **(B)** 3 and 4 only **(C)** 1 and 4 only **(D)** 2 and 4 only

43. 

The product is :

(A)  **(B)**  **(C)**  **(D)** 

44. In Williamson's synthesis, ethoxy ethane is best prepared by :

(A) passing ethanol over heated alumina at 350° C

(B) heating sodium ethoxide with ethyl bromide

(C) treating ethyl alcohol with excess of H_2SO_4 at 430-440K

(D) heating ethanol with dry Ag_2O

45. Phenol undergoes electrophilic substitution more easily than benzene because :

(A) OH group exhibits +M effect and hence increase the electron density on the o- and p-positions

(B) Oxocation is more stable than the carbocation

(C) Both A and B

(D) –OH group exhibits acidic character