

ANSWER	(A) Phenol	(B) o-Hydroxy benzaldehyde / Salicylaldehyde
	(C) p-Hydroxy benzaldehyde	(D) Aniline / Amino benzene

5. Compound A (C_6H_6O) gives violet colouration with neutral $FeCl_3$. With CO_2 at 400 K/4 to 7 atm. followed by acidification with HCl gives B ($C_7H_6O_3$) also gives violet colouration with neutral $FeCl_3$ and gives effervescence with $NaHCO_3$ solution. Compound A reacts with NH_3 at 473 K in the presence of anhydrous $ZnCl_2$ to give compound C (C_6H_7N) which undergoes carbylamine test. Identify A, B, C and explain the reactions.

ANSWER	(A) Phenol	(B) o-Hydroxy benzaldehyde / Salicylaldehyde
	(C) p-Hydroxy benzaldehyde	(D) Aniline / Amino benzene

6. An organic compound (A) of molecular formula C_6H_6O gives violet colour with neutral $FeCl_3$. (A) gives maximum of two isomers (B) and (C) when an alkaline solution of (A) is refluxed with CCl_4 . (A) also reacts with $C_6H_5N_2Cl$ to give the compound (D) which is a red orange dye. Identify (A), (B), (C) and (D). Explain with suitable chemical reactions.

ANSWER	(A) Phenol	(B) o-Hydroxy benzoic acid / Salicylic acid
	(C) p-Hydroxy benzoic acid	(D) p-Hydroxy azo benzene

7. An organic compound A (C_6H_6O) gives violet colour with neutral $FeCl_3$. A gives two isomers B and C, when an alkaline solution of A is refluxed with CCl_4 . A also reacts with formaldehyde and sodium hydroxide to give compound D. Identify A, B, C and D. Explain with suitable chemical reactions.

ANSWER	(A) Phenol	(B) o-Hydroxy benzoic acid / Salicylic acid