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i) C_6H_5CHO
 a) $C_6H_5 = C(OH)HCHO$
 a) Formyl group [Aldehyde group] $[CHO]$
 b) Hydroxyl group $[OH]$
 c) Alkene group (double bond)

ii) $C_6H_5C(=O)NH_2$
 a) Ketone group [Acetyl group] $[CO]$
 b) Amine group $-NH_2$
 c) Aromatic group [Phenyl]

iii) $CH_3C=CHCOH$
 a) Aldehyde group
 b) Hydroxyl group
 c) Double bond [Alkene group]

$$[\alpha]_D^{20} = \frac{\alpha}{L \times C}$$

L = length of sample

C = $\frac{\text{Mass}}{\text{Volume}}$, α - observed rotation at $20^\circ C$

$$S_r = \frac{+1.0}{1.0 \times \left[\frac{0.856}{10} \right]}$$

$$= \frac{1}{0.0856} = 11.68^\circ$$

