

A compound X, of boron reacts with NH_3 on heating to give another compound Y which is called inorganic benzene. The compound X can be prepared by treating BF_3 with Lithium aluminium hydride. The compounds X and Y are represented by the formulas.

(i) B_2H_6 , $\text{B}_3\text{N}_3\text{H}_6$ (ii) B_2O_3 , $\text{B}_3\text{N}_3\text{H}_6$ (iii) BF_3 , $\text{B}_3\text{N}_3\text{H}_6$ (iv) $\text{B}_3\text{N}_3\text{H}_6$, B_2H_6