

Ques 4 Match the species given in column I with properties given in column II.

Column I

Column II

<i> Diborane

<a> used as a flux for soldering metals

<ii> Gallium

 Crystalline form of silica.

<iii> Boron

<c> Banana bonds

<iv> Aluminosilicate

<d> Low melting, high boiling, useful for measuring high temperatures.

<v> Quartz

<e> used as catalyst in petrochemical industries

Solution- <i> \rightarrow (c), <ii> \rightarrow (d), <iii> \rightarrow (a)
<iv> \rightarrow (e), <v> \rightarrow (b)

- BH_3 is unstable, forms diborane B_2H_6 by 3c-2e bonds, shows banana bonds.
- Gallium with low melting point and high boiling point makes it useful to measure high temperatures.
- Boron is used as flux for soldering metals.
- Quartz is a crystalline form of silica.