

- Define what is meant by an “allotrope”. Give an example of a pair of allotropes involving (i) oxygen and (ii) a pair not involving oxygen.

Allotropes are different structural forms of the same element.

(i) Dioxygen, O₂, and ozone, O₃, are allotropes of oxygen.

(ii) Examples include (a) white and red phosphorus, (b) graphite, diamond and fullerene for carbon and (c) rhombic, monoclinic and amorphous sulfur.