

33 In modern periodic table, the period indicate
(c) principal quantum number.

34 Predict the formulae of the stable binary compounds that would formed by the combination

- ans (a) LiO
(b) Mg_3N_2
(c) AlF_3
(d) SiO_2
(e) PF_5
(f) LuF_3

35 Anything that influence the valence electrons will affect the chemistry of element.

ans (c) Nuclear mass.

36 The size of iso electronic species F^- , Ne and Na^+ is affected by

ans (a) Nuclear charge

37 Which of the following statement is incorrect in relation to Ionization Enthalpy?

(d) Removal of electron from orbitals bearing lower n value is easier than from orbital having higher n value.

1) BeCl is a polar compound yet BeCl_2 is a non polar compound.

2) Show σ and π bond formation in C_2H_4 , C_2H_2 , C_2H_6 . Draw orbital diagrams and hybridisation

3) Account for discrepancy in bond angle

i) $\angle \text{HON}$ in water

ii) $\angle \text{HNNH}$ in NH_3

4) compare the bond order and relative stability of

i) O_2 , O_2^- , O_2^{2-} , O_2^+ , O_2^{2+}

ii) N_2 , N_2^+

Predict the magnetic character

5) Define Resonance, draw the resonance structure of

i) CO_3^{2-} ii) CO_2 iii) N_3^-

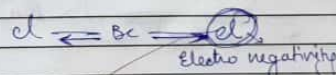
6) Define Hybridisation i) BF_3

7) In PCl_5 are all the P-Cl bond same?

8) Define Hydrogen bond give condition for formation of H bond.

9) Discuss its types and give suitable eg.

1) BeCl_2 is non polar because of the symmetric structure. It's structure is linear so the dipole moment of the compound becomes 0. The force of attraction of electron of both chlorine atom neutralises.



So Be-Cl polar bond and overall it is non-polar bond.