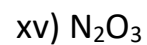
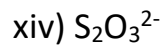
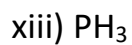
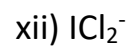
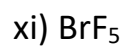
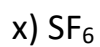
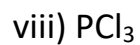
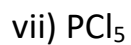
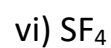




UNIT 2: STRUCTURE AND BONDING-(1)

1) Draw the Lewis dot dash diagrams for the following molecules.



xvi) N_2O_4

xvii) N_2O_5

xviii) NO_2

xix) NO_2^+

xx) NO_2^-

xxi) SO_3^{2-}

xxii) SO_2

xxiii) CCl_4

xxiv) HCN

xxv) CO_2

xxvi) CO

xxvii) ClO_2

xxviii) NH_3

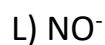
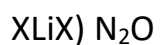
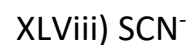
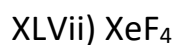
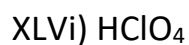
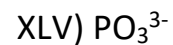
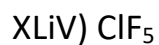
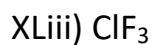
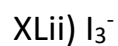
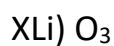
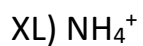
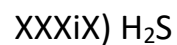
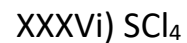
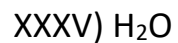
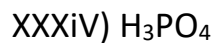
xxix) NH_2^-

xxx) POCl_3

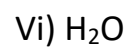
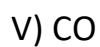
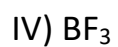
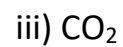
xxxii) SO_3

xxxii) BF_3

xxxiii) CH_4



2) Draw the Lewis dot-dash diagrams for the following molecules.



Vii) CHCl_3

Viii) NCl_3

ix) NI_3

X) CF_2H_2

Xi) CCl_2F_2

Xii) PI_3

Xiii) S_3

XiV) AlH_3

XV) H_2Se

XVi) XeF_2

XVii) H_3PO_3

XViii) HNO_3

XiX) HNO_2

XX) H_2SO_4

XXi) CN^-

XXi) ClO_3^-

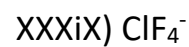
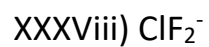
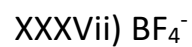
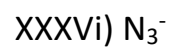
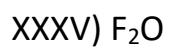
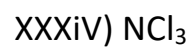
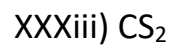
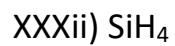
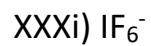
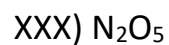
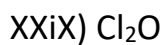
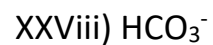
XXiii) HOBr

XXiV) HOCl

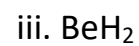
XXV) I_3^-

XXVi) H_3O^+

XXVii) H_2O_2



3) Predict the shapes of the following molecules using the VSEPR theory.



iv. BCl_3

v. AlCl_3

vi. BH_3

Vii. AlF_3

viii. CCl_4

ix. CHCl_3

x. CH_2Cl_2

xi. CH_3Cl

xii. SiH_4

xiii. SiCl_4

xiv. PCl_5

xv. SF_6

xvi. IF_7

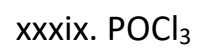
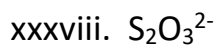
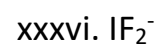
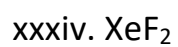
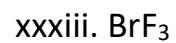
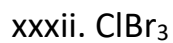
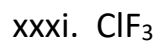
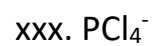
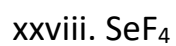
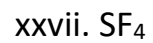
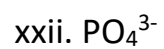
xvii. H_2O

xviii. NO_2

xix. NO_3^-

xx. NO_2^-

xxi. SO_4^{2-}



XL. POClBr

XLI. ClO_2^-

XLII. ClO_3^-

XLIII. ClO_4^-

XLIV. NH_4^+

XLV. BrF_5

XLVI. CO_3^{2-}

XLVII. CO_2

XLVIII. SO_2

XLIX. O_3

L. XeF_6

LI. XeO_3

LII. BF_4^-

LIII. H_3O^+

LIV. HCN

LV. H_2S

LVII. ICl_4^-

LVIII. IF_5