

CHAPTER - 7

THE p-BLOCK ELEMENTS

FORMULAE :

Note : Since there are **no formulae** in this chapter, you are provided with important **structures**.

(1) Hyponitrous acid : $\text{H}_2\text{N}_2\text{O}_2$

(2) Nitrous acid : HNO_2

(3) Nitric acid : HNO_3

(4) Hypophosphoric : $\text{H}_4\text{P}_2\text{O}_6$

(5) Pyrophosphoric : $\text{H}_4\text{P}_2\text{O}_7$

(6) Metaphosphoric : $(\text{HPO}_3)_n$

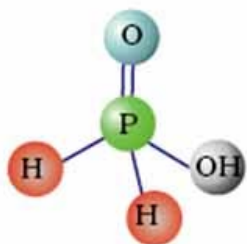
(7) Hypoiodous acid : HOI

(8) Iodic acid : HOIO_2

(9) Periodic acid : **HOIO₃**

(10) Perbromic acid : **HOBRO₃**

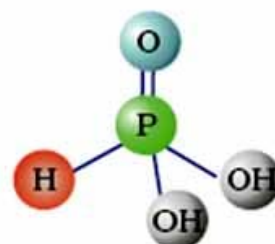
(11)



Hypophosphorous (Phosphinic)

H₃PO₂

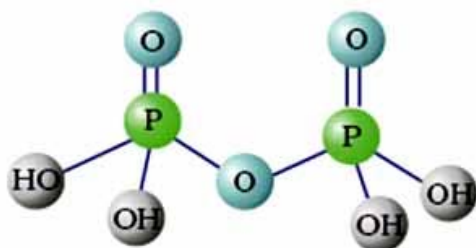
(12)



Orthophosphorous acid

(Phosphonic) H₃PO₃

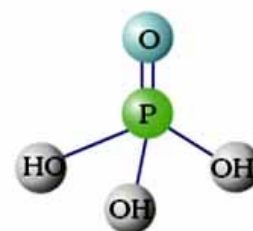
(13)



Pyrophosphoric acid

H₄P₂O₇

(14)



Orthophosphoric acid

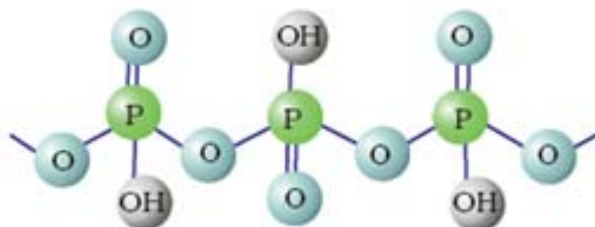
H₃PO₄

(15)



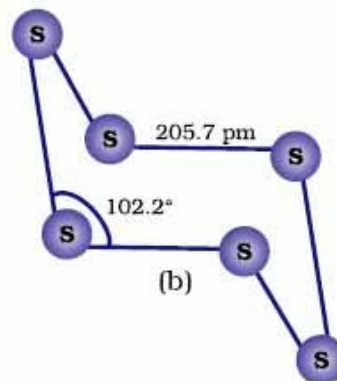
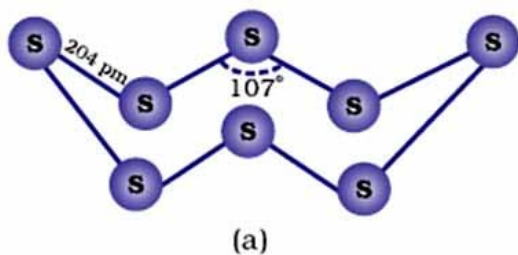
Cyclotrimetaphosphoric acid,
 $(\text{HPO}_3)_3$

(16)



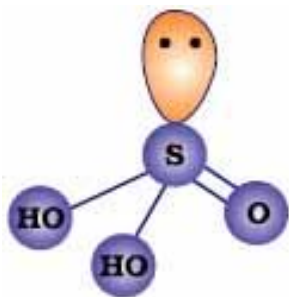
Polymetaphosphoric acid, $(\text{HPO}_3)_n$

(17)

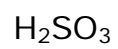


The structures of (a) S_8 ring in **rhombic sulphur** and (b) S_6 form in **rhombic sulphur**

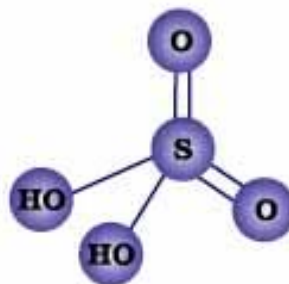
(18)



Sulphurous acid



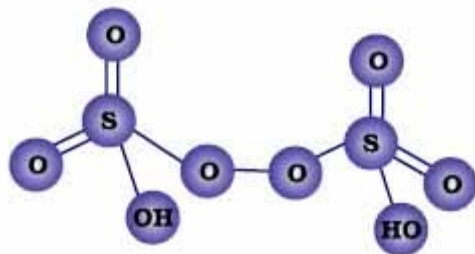
(19)



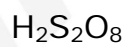
Sulphuric acid



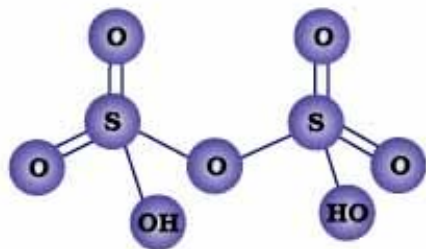
(20)



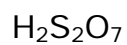
Peroxodisulphuric acid



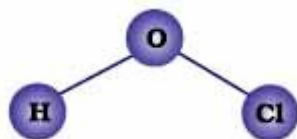
(21)



Pyrosulphuric acid (Oleum)



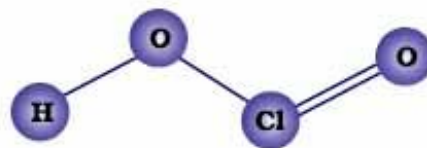
(22)



Hypochlorous acid

Chloric acid HOClO_2

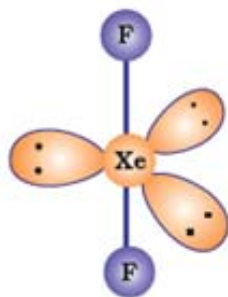
(23)



Chlorous acid

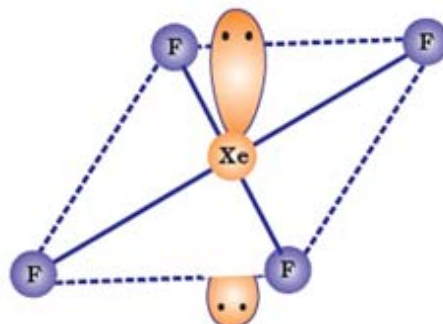
Perchloric acid HOClO_3

(24)



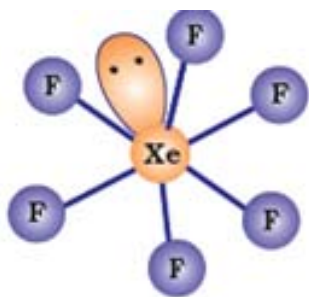
XeF_2 (Linear)

(25)



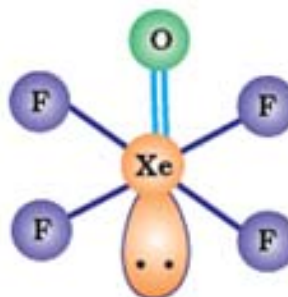
XeF_4 (Square planar)

(26)



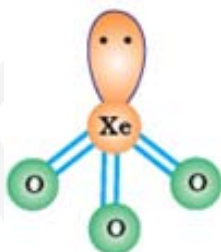
XeF_6 (Distorted octahedral)

(27)



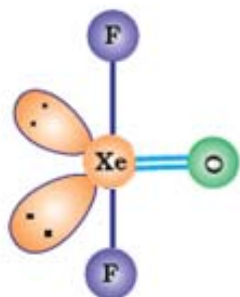
XeOF_4 (Square Pyramidal)

(28)



XeO_3 (Pyramidal)

(29)



XeOF₂(T-Shaped)