Nirogen

$$P = 3P^3$$

$$As = 4p^3$$

$$Sb = 5p^3$$

$$Bi = 6 P^3$$

$$B_i = 1.9$$

Note: NO, N20 > Neutral oxide

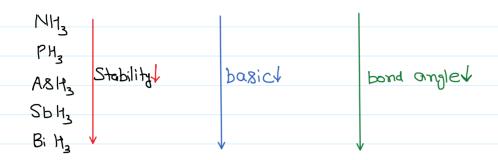
(JEE)

$$0 N_2O_3 + 2NaOH \longrightarrow 2NaNO_2 + H_2O$$

$$A8_2O_3 + NaOH \longrightarrow Na_3A_8O_3$$



Hydrides (MH3)



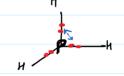
Note

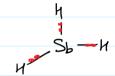
$$NH_3 + H^+ \longrightarrow Jast \longrightarrow NH_4^+$$

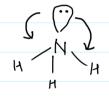
PH3 + H+ VOTY 8(00)

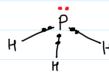
€ > No reaction/bond

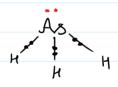
0 : NH3 PH3

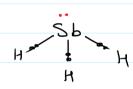




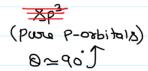


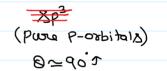


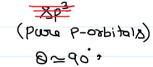


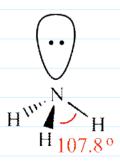


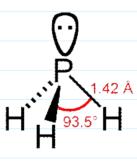
SP³ 0<109²8¹ 0=107°

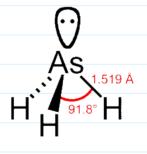


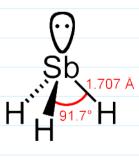












<u>N2</u>

M = M

Bre 1. Lab method NH4NO2 - 2420 + N2 2. $(NH_4)_3(r_2O_7 \xrightarrow{\Delta} 4H_2O + (r_2O_3 + N_2)$ (JEE) 3. $2 Na N_3 \longrightarrow 2 Na + 3 N_2$ $Ba(N_3)_2$ \longrightarrow $Ba + 3N_2$ $\bigcirc EE = 201)$ $R \times N$ $L_1 + N_2 \longrightarrow L_3 N$ $M_3 + N_2 \longrightarrow M_3 N_2$ MH3 Lab method: NH4U NA3+H2O $(NH_4)_2CO_3 + Ca(OH)_2 \longrightarrow Ca(O_3 + 2NH_3 + 2H_2O)$ Indu. Method: $N_2 + 3H_2 \rightarrow 2NH_3$ $\Delta H = -ve$ O xides 1. N₂O Pore: NH4NO3 - 2HO+ N2O VMC Vidyamandir Classes once mis $N = N = 0 \longleftrightarrow N = N = 0$ <u>2</u> NO $N_2 + O_2 \Longrightarrow 2NO \qquad \triangle H = + ve$:N=O: → Para mag.

$$N_0 + N_0 \longrightarrow N_2 O_3$$

$$\begin{array}{ccc} (0.03 + H_2O \longrightarrow HNO_2 \\ (0.04c) \end{array}$$

NO2 (boom Jos)

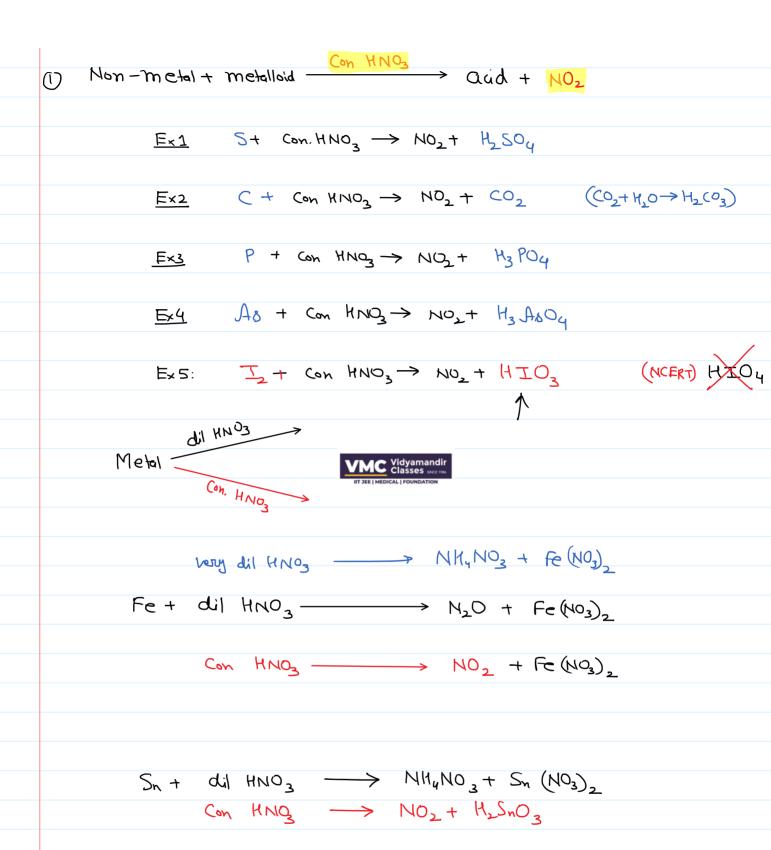
By. NO + O2 -> NO2 (Para)

5 N20s

1. Said (NO, NO3)

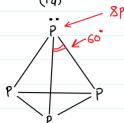
HNO3

chemical Pool:





white





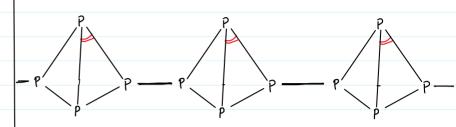
2. Unstable due to a strain

3.
$$\Delta H' = 0$$
 (T.C)

3. $\Delta H_{j} = 0$ (i.c) 4. $l_{4} + 0_{2} \rightarrow l_{2}0_{5}$ glow in right

5. Poisonous in nature

Red







2. more stable

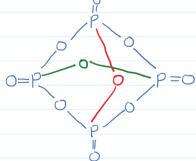
3. $\Delta H_{\frac{1}{2}} = -ve$

4. It does not glow in dank

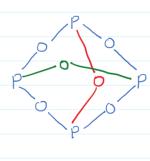
Non- Poigonous

$$PH_3$$
 $P_4 + NaOH + H_2O \longrightarrow PH_3 + NaH_2PO_2$ (JEE)

1 P4010 / P205



2 P406/P203



Oxyacid

1 H3PO3 Phosphorus aid (07th)

2 molecules - H2O > pyro

$$\left(H^{\dagger}\right)^{7}=2$$

3 hypophosphonus aid H3PO2

$$MF-O \Rightarrow hypo$$

1) Phosphosic acid

2) PyroPhosphosic acid

3 meta phosphosic acid

$$2MF-H_2O \rightarrow Pyso$$
 $Mf-H_2O \rightarrow Meta$



Oxy add

(Da) Sulphyrous acid H250,

$$\bigcirc H_2S_2O_4 \qquad H-O-S-S-O-H \qquad OS_5 = +3,+3 \qquad 8p^3/8p^3$$

2) a) Sulphunic acid H, Sou

(b) H2S2O7

©
$$H_2S_2O_3$$
 $H-O-S-O-H$
 $S=-2,+6$
 $S=-2,+6$
 $S=-2,+6$
 $S=-2,+6$
 $S=-2,+6$
 $S=-2,+6$

H - 0 + 15 + 0 - H $OS_s = -2, +6$

$$OS_{s} = -2, +6$$

 $H_2S_2O_6$ H-0-S-S-OH $OS_8 = +5.+5$ $Sp^3/8p^3$

$$H-0-S-S-S-0H$$
 $OS_s = +5,0,+5$ $8p^3/8p^3/8p^3$

$$H-O-S-S-S-S-O-N$$
 $OS= +5,0,0,+5$ $8p^3$