

**CHEMISTRY**  
**p-Block Elements**  
**(from 13 to 18 Group**  
**Elements)**

31. KI when heated with concentrated  $\text{H}_2\text{SO}_4$  gives  
(1) HI (2)  $\text{I}_2$   
(3)  $\text{HIO}_3$  (4)  $\text{KIO}_3$
32. Which of the following halogens is solid at room temperature?  
(1) Chlorine (2) Iodine  
(3) Bromine (4) Fluorine
33. The weakest acid  $\text{HX}$  ( $\text{X}=\text{F}, \text{Cl}, \text{Br}$ ) is  
(1) HF (2) HCl  
(3) HBr (4) HI
34.  $\text{SO}_2$  is obtained when  
(1) oxygen reacts with dilute sulphuric acid  
(2) hydrolysis of dilute  $\text{H}_2\text{SO}_4$   
(3)  $\text{H}_2\text{SO}_4$  reacts with  $\text{Na}_2\text{SO}_3$   
(4) all of these
35. Bond angle is minimum for  
(1)  $\text{H}_2\text{O}$  (2)  $\text{H}_2\text{S}$   
(3)  $\text{H}_2\text{Se}$  (4)  $\text{H}_2\text{Te}$
36. Deep sea divers used to respire a mixture of  
(1) oxygen and argon  
(2) oxygen and helium  
(3) oxygen and nitrogen  
(4) oxygen and hydrogen
37. Ozone is obtained from oxygen  
(1) by oxidation at high temperature  
(2) by oxidation using a catalyst  
(3) by silent electric discharge  
(4) by conversion at high pressure
38. Ozone with KI solution produces  
(1)  $\text{Cl}_2$  (2)  $\text{I}_2$   
(3) HI (4)  $\text{IO}_3$
39. In  $\text{XeF}_2, \text{XeF}_4, \text{XeF}_6$  the number of lone pairs on Xe is respectively  
(1) 2, 3, 1 (2) 1, 2, 3  
(3) 4, 1, 2 (4) 3, 2, 1
40. Which compound acts as an oxidising as well as reducing agent?  
(1)  $\text{SO}_2$  (2)  $\text{MnO}_2$   
(3)  $\text{Al}_2\text{O}_3$  (4)  $\text{CrO}_3$