WORKSHEET

CHAPTER : 16- GROUP ELEMENTS

Answer the following questions :

1. The electron gain enthalpy of oxygen is less than sulphur why?

2. Why $H_2S$ is stronger acid than $H_2O$?

3. $SF_6$ is known but $SH_6$ is not known. Explain.

4. Assign a reason for each of the following :

(i) $SCl_6$ is not known but $SF_6$ is known.

(ii) $SF_6$ is used as a gaseous electrical insulator.

5. Why the compounds of fluorine with oxygen are called as fluorides of oxygen and not the oxides of fluorine?

6. Elements of group 16 generally show lower value of first ionization enthalpy compared to the corresponding elements of group 15. Why?

7. Which form of sulphur shows paramagnetic behavior?

8. What happens when :

(i) Conc. $H_2SO_4$ is added to calcium fluoride.

(ii) $SO_3$ is passed through water?

9. Are all bonds in $SO_2$ equivalent? Justify.

10. Write the order of thermal stability of the hydrides of group-16 elements.

11. Why $H_2O$ is a liquid and $H_2S$ a gas ?

12. How is the presence of $SO_2$ detected?

13. How $O_3$ estimated ?

14. Write the conditions to maximize the yield of $H_2SO_4$ by contact process.

15. Why is $Ka_2$ less than $Ka_1$ for $H_2SO_4$ in water?

16. How is $SO_2$ an air pollutant?

17. What happens when $SO_2$ is passed through an aqueous solution of Fe(III) salt?

18. Why $OF_6$ does not exist but $SF_6$ exists?