ONE TWO ACADEMY

STD 10 SCIENCE

Atoms and Molecules

Total:- 25 marks **Time:- 45 minutes**

Answer the following questions: **4 x 1 = 4**

1. _____ is the longest period in the periodic table.
2. _____ and _____ are called inner transition elements.
3. Why Neon shows zero electron affinity ?
4. The number of periods and groups in the periodic table are _____ .

Answer any three of the following questions:- **3 x 2 = 6**

5. Name the acid that renders Al passive. Why ?
6. An uncleaned copper vessel is covered with greenish layer why ?
7. A is a silverly white metal. A combines with O_2 to form B at 800°C, the alloy of A is used in making aircraft. Find A and B.
8. What is Amalgam and give the reasons for alloying.

Answer any two of the following questions:- **2 x 4 = 8**

9. a) What is rust ?
   b) Give the equation or the formation of rust.
   c) What is the chemical name of rust.
   d) State two conditions necessary for rusting.
10. Complete the following table.

Zone	Temperature	Chemical Process
Combustion zone		
		$CaCO_3 \longrightarrow CaO+CO_2$ $CaO+SiO_2 \longrightarrow CaSiO_3$
	400°C	

11. Explain Chemical Leaching.

Answer any one of the following questions:- **1 x 7 = 7**

12. Define the following terms

(i) Cation.

(ii) Electron affinity.

(iii) Electron negativity.

(iv) Atomic radius.

13. What are the methods of preventing corrosion?