**Aarambh Classes**

**Class X**

**SCIENCE QUESTIONS**

**METALS AND NON METALS**

1. Assertion : Zinc oxide is amphoteric in nature .

Reason :Zinc oxide reacts with both acids and bases .

1. Assertion : Nitrogen is a non metal .

Reason: Nitrogen has 5 valence electrons .

1. Assertion : Hydrogen gas is not evolved when a metal reacts with nitric acid .

Reason : Nitric acid is astrong oxidising agent .

1. Assertion : Highly reactive metals are obtained by electrolytic reduction .

Reason : In the electrolytic reduction , metal is deposited at the cathode .

1. Assertion : Bronze is an alloy of copper and tin .

Reason : Alloys are heterogenous mixture of metals with other metals and non metals .

6. Assertion : Zinc oxide is amphoteric in nature .

Reason : Zinc oxid ereacts with both acids and bases .

7. Assertion : Magnesium chloride is an ionic compound .

Reason : Metals and non metals react by mutual transfer of electrons .

8. Assertion : Zinc can easily displace copper on reacting with a solution of copper sulphate .

Reason : Copper is more reactive metal as compared to zinc .

9. Assertion : Zinc carbonate is heated strongly in presence of air to form zinc oxide and carbondioxide .

Reason : Calcination is the process in which a carbonate ore is heated strongly in absence of air to convert into metal oxide .

10. Assertion : zinc becomes dull in moist air .

Reason : Zinc is coated by a thin film of its basic carbonate in moist air .

11. Assertion :MgCl2 is acovalent compound .

Reason : MgCl2 is a good conductor of electricity in molten state .

12. Assertion : Anodising is a method to prevent metal from corrison .

Reason : Anodising is a process of coating iron with a layer of zinc .

13. Assertion : the reaction of calcium with water is less violent in comparison to that of sodium .

Reason : the heat evolved is not sufficient for the hydrogen to catch fire .

14. Assertion : C and N do not react with dil Hcl and dIL H2SO4

Reason : Metals do not react with dil. HCL and dil H2SO4 .

15. Assertion : Copper displaces silver from silver nitrate solution .

Reason : Copper is more reactive than silver .

16. Assertion : Aluminium oxide and zinc oxide are acidic in nature .

Reason : Amphoteric nature means that substance have both acidic and basic character .

17. Assertion : Gold occurs in native state .

Reason : Gold is a reactive metal .

18. Assertion : The oxides of sulphur and phosphorous are acidic in nature .

Reason : Metal oxides are basic in nature .

19. Assertion : On reactiing with water calcium starts floating over water .

Reason : Calcium reacts with cold water at room temperature .

20. Assertion : Non metals are electronegative in nature .

Reason : They have tendency to lose electrons .