PRACTICE TEST PAPER: CLASS-X METALS AND NON-METALS

- 1. Aluminum occurs as a compound whereas gold is found in free state. Why?
- 2. What are the constituents of the alloy called "stainless steel"?
- 3. Name one metal and one non-metal element which are obtained on a large scale from sea water.
- 4. List the constituents of brass.
- 5. What is Aqua Regia?
- 6. What is thermite reaction?
- 7. Name two metals (other than gold) which occur in free state in nature
- 8. Identify the most reactive and least reactive metal from Hg, Na, Fe and Ag.
- 9. Name any two metals which are soft.
- 10. What is gangue?
- 11.On the basis of electron exchange, define
 - a. Metals
 - b. Non-metals

Support your answer with an example of each

- 12. What is an alloy? Give two reasons as to why gold is alloyed.
- 13. When a Cu wire is left in AgNO₃, it is observed that the solution turns bluish-green. Explain this observation, along with a balance equation to represent the change taking place.
- 14. By giving examples explain the following terms used in metallurgy
 - a. Roasting
 - b. Calcination
- 15. What are electrovalent compounds?
- 16. Why do ionic compounds have high melting and boiling points?
- 17. Why does Fe displace Cu from CuSO₄?
- 18. Write chemical equations for the reactions that take place during the following events
 - a. Steam is passed over red hot iron
 - b. SO₂ gas is dissolved in water
 - c. ZnS is heated in air
 - d. CO₂ is passed through lime water
- 19. Give reasons
 - a. Metals conduct electricity
 - b. Reactions of HNO₃ with metal usually do not evolve hydrogen gas
 - c. For making gold ornaments, 22K gold is preferred over 24K gold.
- 20. Why are ores and not minerals used for extraction of metals?
- 21. State the three major steps usually involved in metallurgical process