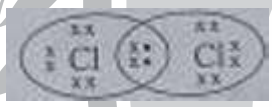
1. *Which of the following property is generally not shown by metal?*
   (a) Electrical conduction (b) Sonorous in nature
   (c) Dullness (d) Ductility
2. *The ability of metals to be drawn into thin wire is known as:*
   (a) Ductility (b) Malleability
   (c) Sonorousity (d) Consuctivity
3. *Aluminium is used for making cooking utensils. Which of the following properties of aluminium are responsible for the same?*
   (i) Good thermal conductivity (ii) Good electrical conductivity
   (iii) Ductility (iv) High melting point
   (a) (i) and (iii) (b) (i) and (iii) (c) (ii) and (iii) (d) (i) and (iv)
4. *The electron dot structure of chlorine molecule is:*
   (a)  *(b)*  *(c)*  *(d)* 
5. *Which gas is liberated when a metal reacts with an acid? How will you test the presence of this gas?*
6. *Name an ore of Mercury and state the form in which Mercury is present in it.*
7. *Name one property which is charateristic of (a) metals, and (b) non-metals.*
8. *What is meant by "brittleness"? Which type of elements usually show brittleness: metal or non-metals?*
9. *An ore on treatment with dilute hydrochloric acid produces brisk effervesces. What type of ore is this? What steps will be required to obtain metal from the enriched ore.*
10. *(a) Explain any two physical propeeties of ionic compounds giving reasons.*
    (b) List any two metals found in free state in earth's crust.
    (c) Metals towards the top of the activity series cannot be obtained from their compounds by reducing with carbon. Why?
11. *Give reasons for the following:*
    (a) Silver and copper lose their shine when they are exposed to air. Name the substance formed on their surface in each case.
    (b) Tarnished copper vessels are cleaned with tamarind juice.
    (c) Aluminium is more reactive than iron yet there is less corrosion of aluminium as compared to iron when both are exposed to air.
12. *Ferrous sulphate solution should not be stored in zinc containers, why?*
13. *10 ml of freshly prepared iron sulphate was taken in each of the four test tubes. Strips of copper, iron, zinc and aluminium was introduced in separate test tubes. A residue was obtained in two of them. What will be the right pair of metals forming the precipitates?*
14. *When you place an iron nail in copper sulphate solution, what will be the nature of the reddish brown coating formed on the nail?*
15. *Copper coin is kept immersed in silver nitrate solution for some time. What change will take place in coin and colour of the solution? Write balanced chemical equation of the reaction involved.*
16. *Write any four properties shown by the metal gold, which allowed our ancestors to choose it for preparation of arnaments.*

Directions: *In the following questions, a statement of assertion is followed by a statement of reason. Mark the correct choice as:*
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.

(d) If assertion is false but reason is true.

17. ***Assertion :*** *Aluminium is used to make utensils for cooking.*
Reason : *Aluminium is a highly reactive metal.*

18. ***Assertion :*** *Paint is applied on silver articles.*
Reason : *To protect the iron article from rusting.*

19. *The reaction of a metal A with Fe_2O_3 is highly exothermic and is used to join railway tracks.*
(a) Identify the metal A and name the reaction taking place.
(b) Write the chemical equation for the reaction of metal A with Fe_2O_3.

20. *From the given table, answer the following questions:*

S. No.	Metals	Non-metals
1.	Lustrous	Non-lustrous
2.	Hard	Soft
3.	Ductile	Non-ductile
4.	Malleable	Non-mallaeable
5.	Good conductors	Poor conductors

(a) Give one example each of metals and non-metals.
(b) Explain ductility.
(c) Explain malleability
(d) What is meant by lustre?

21. *Read the passage carefully and answer any four questions from 21 (i) to (v).*
The chemical reactivity of an element depends upon the atomic structure and its electronic configuration. Chemical reactivity is shown by all elements which have less than eight electrons in the outermost shell. Through chemical reaction, atoms of all elements actually try to achieve a completely filled valence shell. Metals have the tendency to loss one or more electrons from their valence shell and achieve the nearest noble gas configuration. This property of the metals is called electropositivity. The compounds formed by the transfer of electrons from one element to other are known as ionic or electrovalent compounds.

(i) *Three elements A, B and C have their electronic configuration as shown below:*
A : 2, Y : 2, 8, 7 Z : 2, 8, 2
Which of the following is correct regarding these elements?
(a) A is a metal (b) Y is a metal
(c) Z is a non metal (d) Y is a non-metal and Z is a metal

(ii) *Element S reacts with element T to form a compound C. During the formation of compound C, atoms of S lose one electron whereas T gains one electron each. Which of the following properties is not shown by compound C?*
(a) High melting point (b) Low melting point
(c) Occurrence as solid (d) Conduction of electricity in the molten state

(iii) *The electronic configuration of sodium ion is:*
(a) 2, 8, 8 (b) 2, 8, 2 (c) 2, 6 (d) 2, 8

(iv) *Which of the following represents an electropositive element?*
(a) 2, 8, 8, 1 (b) 2, 8, 8 (c) 2, 8, 6 (d) 2, 7

(v) *Choose the incorrect one:*
(a) An ionic bond represents sharing of electrons
(b) Metals are electropositive
(c) Non-metals are electronegative
(d) Atoms react in order to complete their octet