

# Metals & Non- Metals

## SHORT ANSWER TYPE QUESTION: -

Q.1. Write one example of each of: -

(a). A metal which is so soft that, it can be cut with knife and a non-metal which is the hardest substance?

**Ans:** Metal- sodium

Non- metals - carbon (diamond)

(b) A metal and a non- metal which exist as liquid at room temperature?

**Ans:** Mercury is liquid metal and Bromine is non-metals

Q.2. Mention the names of the metals for the following

(a) Two metals which are alloyed with iron to make stainless steel?

**Ans:** Nickel and Chromium

(b) Two metals which are used to make jewelry?

**Ans:** Gold and Platinum

(c) Due to which property of metals are metallic foils prepared?

**Ans:** Metallic foils are prepared, making use of the malleable property of metals.

Q.3 Give reason: -

(a) Zinc oxide is considered an amphoteric oxide.

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**Ans:** Because it shows both acidic and basic behavior.

(b) Non-metals in general do not displace hydrogen from dil. acids.

**Ans:** Non-metals do not react with dil. acid hence do not displace hydrogen from dil. Acids

(c) Metals conduct electricity.

**Ans:** Because they contain free electron which can move easily through the metal and conduct electric current.

Q.4. Name an ore of zinc other than zinc oxide. By what process can this ore be converted to zinc oxide?

**Ans:** Zinc blende (ZnS) is an ore of zinc other than zinc oxide. Roasting is the process by which ZnS can be converted into zinc oxide.

Q.5. Write chemical equations for reactions taking place when-

(a) Cinnabar is heated in air-



(b) Concentrated sulphuric acids and Sulphur are heated together. Calcium metal reacts with water.



Q.6. Give reason for the following:

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(a) School bells are made up of metals.

**Ans:** It is because metals are sonorous, i.e. they produce sound when struck with a hard substance.

(b) Electric wires are made up of copper.

**Ans:** It is because copper is good conductor of electricity.

Q.7. Why do silver ornaments lose their shine when kept for some time?

**Ans.** Silver react with Sulphur in air and becomes silver sulphide which is black in color so the shine lost.

Q.8. Why do ionic compounds have high melting point?

**Ans:** In an ionic compound there is large electrostatic force of attraction between opposite charged ions. To overcome these forces a considerable amount of energy is needed therefore ionic compound have high melting point.

Q.9. Which metals do not corrode easily?

**Ans:** Noble metals such as gold and platinum do not corrode easily.

Q.10. What are alloys?

**Ans:** Alloys are homogenous mixture of element where one element is metal and other elements can be metal and non-metals.

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