

# 10<sup>th</sup> Standard Mid Term Examination - Sep/Oct - 2019

Time : 3.00 hrs.

Subject - SCIENCE

Marks : 80

I Four alternatives are given below for each statement, choose the appropriate one and write with its serial number.

8x1=8

- Highly reactive metals are best reducing agents. The best example for this statement is  
A)  $PbO + C \rightarrow Pb + CO$     B)  $3MnO_2 + 4Al \rightarrow 2Al_2O_3 + 3Mn$   
C)  $ZnO + C \rightarrow Zn + CO$     D)  $CuO + H_2 \rightarrow Cu + H_2O$
- Which one of the following types of medicines is used for treating indigestion?  
A) Antibiotic                      B) Analgesic                      C) Antacid                      D) Antiseptic
- Arrange the following metallic groups in descending order on the basis of their reactivity.  
A) Cu, Zn, Mg, K                      B) K, Mg, Zn, Cu                      C) Mg, Cu, K, Zn                      D) Zn, Cu, K, Mg
- When there is a lack of oxygen in muscle cells, the break down of glucose is taken as follows  
A) Lactic acid + Energy                      B) Ethanol + carbon dioxide + energy  
C) Carbon dioxide + Water + Energy                      D) Acetic acid + Energy
- Which one of the following statement is not correct related to insulin hormone  
A) It produces in Pancreatic gland                      B) It controls body development  
C) It controls sugar level in the blood.                      D) Insufficient secretion of insulin will cause diabetes.
- How much work is done in moving a charge of 2C across two points having a potential difference 12 V?  
A) 14J                      B) 10 J                      C) 24J                      D) 6 J
- A device which is used to produce electric current  
A) Dynamo                      B) Galvanometer                      C) Ammeter                      D) Motor
- Which one of the following is an eco friendly practice?  
A) Unnecessary usage of electric bulbs                      B) Usage of Plastic bags  
C) Usage of bike to drop the children to school  
D) Usage of Vegetable wastes as fertilisers to grow plants.

II Answer the following in a word or a phrase.

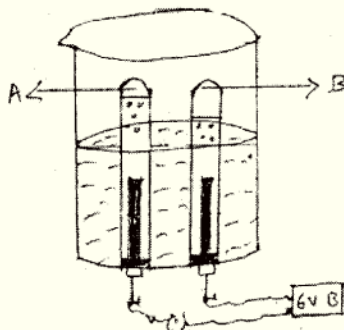
8x1=8

- What do you mean by corrosion?
- A gas released when a metal reacts with oil, acid is passed through a soap solution. Soap bubbles are formed. Then name the gas which is released here.
- Name the metal which is most ductile and malleable.
- What is translocation?
- Write the formula which shows Ohm's law
- On which principle does an electric fuse and an electric iron box work?
- Give scientific reason.  
Magnetic field increases as the number of turns of the coil increases in a current carrying conductor.
- What is biomagnification?

(P.T.O)

**III Answer the following in two or three sentences.**

17. What are the differences between exothermic and endothermic reactions.
18. In the following diagram of electrolysis of water, name the gases released in test tube A and test tube B



19. Draw a diagram showing the reaction of zinc granules with dilute sulphuric acid.
20. List any four properties of ionic compounds.

**OR**

List any four physical properties of metals.

21. Why is it necessary to separate oxygenated and deoxygenated blood in mammals and birds?
22. Draw a diagram of a Neuron.
23. What are the differences between bio-degradable and non-bio degradable substances?

**OR**

Construct a simple food chain and state the different trophic levels in it.

24. Draw a neat diagram of resistors in series of an electric circuit.

**IV Answer the following questions.**

9x3=27

25. A) What is neutralisation?  
B) Write the chemical names of the following  
i) common salt                      ii) Bleaching powder                      iii) Plaster of paris                      iv) Baking soda
26. The PH values of four solutions A, B, C and D are 5, 12, 8 and 9, respectively. Arrange them in the increasing order of their hydroxylion concentration. Which solution among them has strong acidic property? Explain what happens if our mouth contains the PH of solution A?

**OR**

When sulphuric acid is added to 1g solid sodium chloride taken in a test tube which gas is released? What changes do you observe when you test the gas with dry and wet titmus paper? What conclusion do you draw by this experiment?

27. Give reasons.
- A) Gold and silver are used in the preparation of ornaments.
- B) Sodium is always preserved in kerosene
- C) Carbonates and sulphide ores are usually  
Converted into oxides during the process of extraction.

**OR**

Write the balanced chemical equations of the following reactions.

- A) When aluminium reacts with air
- B) When sodium reacts with water.

