

**GRADE: X TERMINAL TEST (JULY) 2019 - 20 MARKS: 80**

**DATE: 26.07 .2019 SCIENCE TIME: 3Hrs**

1. Name the reactant used and type of reaction given below: \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_ -> NaCl+ BaSO4 (1)
2. Plaster of Paris should be stored in a moisture-proof container. Explain why? (1)
3. Why does tooth decay start when the pH of mouth is lower than 5.5?(1)
4. Ionic compounds are good conductors in solution. Why? (1)
5. What is Solder? (1)
6. Which has higher resistance – a 50W bulb or a 2.5W bulb and how many times? (1)
7. Name the physical quantity whose unit is V/A. (1)
8. What is the role of split ring in an electric motor? (1)
9. Why is neon gas filled inside the bulb? (1)
10. Identify the substances that are oxidised and the substances that are reduced in the following reaction:

MnO2 + HCl -> MnCl2 + Cl2 +H2O (1)

1. What is the principle of an electric motor? (1)
2. When is the force experienced by a current-carrying conductor placed in a magnetic field largest? (1)
3. What is meant by saying that the potential difference between two points is 1 V? (1)
4. Why a leaf is boiled in alcohol before doing starch test? (1)
5. Why does the medium become acidic in mouth? (1)
6. Where does aerobic respiration occur in a cell? (1)Name the component of blood which transport: (1) a) Food, carbon dioxide and nitrogenous wastes b) Oxygen.
7. Mention the respiratory unit of lungs and excretory unit of kidneys. (1)
8. Name the part of the brain which controls posture and balance of the body. (1)
9. Name the sensory receptors found in the nose and on the tongue. (1)
10. How is CaCl2 formed by the transfer of electrons? Draw the electron dot structure of the compound. What type of bond is formed and what are the ions present in this compound? (1+1+1/2+1/2)
11. What happens when Zinc is added to the aqueous solution of iron sulphate? Give a balanced equation for the reaction. Name and define

 the type of reaction involved in the above reaction. (1+1+1)

1. What happens when dilute Hydrochloric acid is added to the following?

a) Calcium hydroxide b) Zinc metal c) Sodium hydrogen carbonates.

24. Answer the following: (2+1)

a) What is resistivity and what is its unit?

b) Why is a coil of electric toaster and electric iron are made of alloy rather than a pure metal?

25. Resistance of a metal wire of length 2m is 30 ohms at temperature 25oC, if diameter of the wire is 0.6mm, then what will be the resistivity of the metal at that temperature? (3)

26. i. An electric heater of 500 W operates 12hr/days. What is the cost of the energy to operate it for 30 days at 4 rupees per kWh?

ii. State Joules law of Heating. (2+1)

27. Explain :

a) On what factors does resistance of a conductor depend?

b) What would be the new resistance if length of a conductor is doubled and thickness is halved? (1+2)

28. a)An old man is advised by his doctor to take less sugar in his diet. Name the disease from which the man is suffering. Mention the hormone due to imbalance of which he is suffering from this disease. Which endocrine gland secretes this hormone?

 b)Name the endocrine gland which secretes growth hormone. What will be the effect of the following on a person:

 i)Deficiency of growth hormone.

 ii)Excess secretion of growth hormone. (1½+1½)

29.a)Mention the site of exchange of material between the blood and surrounding cells.

 b)Draw a schematic representation of transport and exchange of oxygen and carbon dioxide. (1+2)

30. With the help of a schematic flowchart, show the break down of glucose in a cell to provide energy:

 a)in the presence of oxygen

 b)in the absence of oxygen

 c)when there is lack of oxygen (1+1+1)

31. Answer the following: (2+3)

a) Name the ore of copper.

b) How is it extracted from its ore?

c) Explain the process of purification of copper.

32. a. What is Chlor alkali process? Give any two uses of all the products obtained in the process. (3)

 b. Write the balanced chemical equation of preparation of baking

 soda? Giving two uses of wasing powder. (2)

33. Write the answers of the given questions: (1+2+2)

a) State one main difference between AC and DC.

b) Give two reasons why different electrical appliances in a domestic circuit are connected in parallel?

c) Explain why, two magnetic lines of force do not intersect?

34. a. State the rule to determine the direction of a magnetic field produced

 around a straight conductor-carrying current. (2)

b) Explain with diagram Fleming’s left hand rule. (3)

35. a) Define reflex arc. Draw a flowchart showing the sequence of events which occur during sneezing. (3)

 b) List four plant hormones. Write one function of each. (2)

36. a.Draw the human respiratory system and label the following:

 Lung, bronchi and alveolar sac.

 b.During breathing cycle, what is the advantage of residual volume of air in lungs? Explain. (4+1)