

GENIUS HIGH SCHOOL :: BHUVANAGIRI
PERIODIC TEST - II

Subject :General Science

Marks :40

Class : X

Time : 1 ½ Hrs

I. Choose the correct answer:

(40 X 1 = 40)

1. Which of the following is a displacement reaction?

- a) $\text{MgCO}_3 \longrightarrow \text{MgO} + \text{CO}_2$ b) $2\text{Na} + 2\text{H}_2\text{O} \longrightarrow 2\text{NaOH} + \text{H}_2$
c) $2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$ d) $2\text{Pb}(\text{NO}_3)_2 \xrightarrow{\text{HEAT}} 2\text{PbO} + 4\text{NO}_2 + \text{O}_2$

2. Which of the following are exothermic processes

- i) Reaction with water with quick lime ii) Dilution of acid
iii) Evaporation of water iv) Sublimation of camphor
a) i and ii b) ii and iii c) i and iv d) ii and iv

3. What type of chemical reactions take place when electricity is passed through water?

- a) Displacement b) combination c) decomposition d) double displacement

4. A substance added to food containing fats and oils is called

- a) oxidant b) rancid c) coolant d) antioxidant

5. Name the products formed when iron filings are heated with dilute HCl acid

- a) Fe(III) chloride & water b) Fe(II) chloride & water
c) Fe(II) chloride & hydrogen gas d) Fe(III) chloride & hydrogen gas

6. Identify 'x', 'y' and 'z' in the following balanced reaction.

- $x \text{Pb}(\text{NO}_3)_2 (\text{S}) \xrightarrow{\text{HEAT}} y \text{PbO} (\text{S}) + z \text{NO}_2 (\text{g}) + \text{O}_2 (\text{g})$
a) 2,4,2 b) 2,2,4 c) 2,4,4 d) 4,2,2

7. Which of the following reaction will not take place.

- a) $\text{Zn} + \text{CuSO}_4 \longrightarrow \text{ZnSO}_4 + \text{Cu}$ b) $2\text{KBr} + \text{Cl}_2 \longrightarrow 2\text{KCl} + \text{Br}_2$
c) $\text{Zn} + \text{MgSO}_4 \longrightarrow \text{ZnSO}_4 + \text{Mg}$ d) $\text{Mg} + \text{FeSO}_4 \longrightarrow \text{MgSO}_4 + \text{Fe}$

8. $\text{MnO}_2 + 4\text{HCl} \longrightarrow \text{MnCl}_2 + 2\text{H}_2\text{O} + \text{Cl}_2$. The oxidising agent is

- a) MnO_2 b) HCl c) MnCl_2 d) $\text{Ag} + \text{Zn}(\text{NO}_3)_2$

9. Assertion: Zinc reacts with sulphuric acid to form Zinc Sulphate & Hydrogen gas

Reason: Zinc reacts with oxygen to form Zinc oxide

- a) Assertion is wrong & reason is correct b) Assertion and reason are correct & reason is not correct
c) Both are wrong d) None of these

10. A balanced chemical equation has equal masses of various elements in

- a) products only b) products and reactants c) only reactants d) none of these

11. $\text{CaO} + 2\text{HCl} \longrightarrow \text{CaCl}_2 + \text{H}_2\text{O}$ is neutralisation reaction

- a) true b) false c) reaction is not valid d) none

12. Match the following:-

Column-1

- a. food is cooked
b. evaporation of water
c. writing chemical equation in words
d. not balanced chemical equation

Column-2

- i) physical change
ii) word equation
iii) chemical change
iv) skeletal equation

13 & 14. $\text{Fe}_2 + 2\text{Al} \longrightarrow \text{Al}_2\text{O}_3 + 2\text{Fe}$, is example of

- a) Combination reaction b) Double displacement reaction
c) Decomposition reaction d) Displacement reaction

15. Which of the following is not a chemical reaction

- a) melting of ice b) digestion of food c) milk is turned into curd d) photosynthesis process

16. Which type of chemical reaction is involved in black & white photography?

- a) Displacement reaction b) Double displacement reaction
c) Combination reaction d) Decomposition reaction

17. $\text{Zn} + \text{C} \longrightarrow \text{Zn} + \text{CO}$, Choose the correct option
 a) Carbon is reduced & Zinc is oxidised
 b) Carbon is oxidised & Zinc is reduced
 c) Carbon & Zinc both are reduced
 d) Carbon & Zinc both are oxidised
18. Which of the balanced equation is correct for given word equation, calcium hydroxide reacting with carbon dioxide and gives calcium carbonate & water
 a) $\text{Ca(OH)}_2 + \text{CO}_2 \longrightarrow \text{CaCO}_3 + 2\text{H}_2\text{O}$
 b) $\text{Ca(OH)}_2 + \text{CO}_2 \longrightarrow \text{CaCO}_3 + \text{H}_2\text{O}$
 c) $\text{Ca(OH)} + \text{CO}_2 \longrightarrow 2\text{CaCO}_3 + \text{H}_2\text{O}$
 d) $\text{Ca(OH)} + 2\text{CO}_2 \longrightarrow \text{CaCO}_3 + \text{H}_2\text{O}$
19. Endothermic reaction is
 a) energy released
 b) energy is absorbed
 c) both a & b
 d) None
20. Which one of the following types of medicine is used for treating indigestion
 a) antibiotic
 b) analgesic
 c) antacid
 d) antiseptic
21. 10ml of solution of NaOH is found to be completely neutralised by 8ml of a given solution of HCl. If we take 20ml of the same solution of NaOH, the amount of HCl solution required to neutralise it will be.
 a) 4ml
 b) 8ml
 c) 12ml
 d) 16ml
22. Acid + _____ salt & water
 a) Base
 b) acid
 c) CO_2
 d) Oxygen
23. Which gas is evolved when acid reacts with Zinc metal?
 a) Hydrogen
 b) Nitrogen
 c) CO_2 gas
 d) Oxygen
24. A solution turning red litmus (indicator) into blue colour
 a) acid
 b) base
 c) water
 d) none
25. Identify acid of the following
 a) CH_3COOH
 b) $\text{C}_2\text{H}_5\text{OH}$
 c) NaOH
 d) Ca(OH)_2
26. Which of the following are energy foods?
 a) Carbohydrates and fats
 b) proteins and mineral salts
 c) vitamins and minerals
 d) water and roughage
27. In which mode of nutrition an organism derives its food from the body of another living organism without Killing
 a) Saprotrophic nutrition
 b) Parasitic nutrition
 c) Holozoic nutrition
 d) Autotrophic nutrition
28. Assertion(A): Digestion in Human body is extra cellular
 Reason (R) : Digestive system of man comprises two parts
 a) Both A) and R) are true R is correction explanation of (A)
 b) Both A) and R) are true R is not correction explanation of (A)
 c) (A) is true (R) is false
 d) (A) is false but (R) is true
29. Assertion (A): Haemoglobin is the respiratory pigment in man.
 Reason (R): Haemoglobin is helpful in transportation of O_2 and CO_2
 a) Both A) and R) are true R is correction explanation of (A)
 b) Both A) and R) are true R is not correction explanation of (A)
 c) (A) is true (R) is false
 d) (A) is false but (R) is true
30. Roots of the plants absorbs water from the soil through the process of
 a) diffusion
 b) transportation
 c) osmosis
 d) none of these
31. Which of the following events in the mouth cavity will be effected if salivary amylase is lacking in the saliva.
 a) starch breaking down into sugars
 b) protein breaking down into amino acids
 c) absorption of vitamins
 d) fats breaking down into fatty acids and glycerol
32. What are the products obtained by anaerobic respiration in plants?
 a) lactic acid + energy
 b) CO_2 + water + energy
 c) ethonol + CO_2 + energy
 d) pyruvate

33. Identify the correct path of urine in the human body.

- a) kidney → urinary bladder → urethra → ureter
- b) urinary bladder → ureter → kidney → urethra
- c) kidney → ureter → urethra → urinary bladder
- b) kidney → ureter → urinary bladder → urethra

34. Read the following and choose the correct statements.

- a) The blood has platelet cells, which help in blood clotting.
- b) Breaking of pyruvate using O_2 takes place in the mitochondria.
- c) Rings of cartilage are present in the wind pipe to ensure that the air passage does not collapse.
- d) Xylem transports the food materials from the leaves to the plant body.

- a) a & b
- b) a & c
- c) a & b & c
- d) All are correct

35. The procedure used for cleaning the blood of a person by separating urea is called.

- a) osmosis
- b) filtration
- c) dialysis
- d) double circulation

36. When a few drops of Iodine solution are added to the rice water, the solution turns blue-black in colour. This indicates that rice water contain

- a) fats
- b) complex proteins
- c) starch
- d) simple proteins

37. When water enters the guard cells the stomata

- a) opens
- b) closes
- c) opens and closes
- d) no effect

38. Find the correct matching

Column-1

- a. Right Atrium
- b. Right Ventricle
- c. Left Atrium
- d. Left Ventricle

Column-2

- i) Oxygenated blood
- ii) de-Oxygenated blood
- iii) pumps the blood to the lungs
- iv) pumps the blood to body parts

- a) a-ii, b-i, c-iii, d-iv
- b) a-ii, b-iii, c-i, d-iv
- c) a-iv, b-ii, c-iii, d-i
- d) a-ii, b-iii, c-iv, d-I

39. Due to strenuous exercise which of the following is formed in muscles.

- a) Hydrochloric acid
- b) Lactic acid
- c) Fumaric acid
- d) Pyruvate

40. Contraction waves started from the following in Heart are

- a) Sino-Auricular node
- b) Auriculo ventricular node
- c) Bundle of his
- d) none of these