

**COMMON HALF YEARLY EXAMINATION - 2023****Std - IX****SCIENCE**

Time : 2.30 Hours

Marks:75

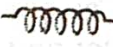

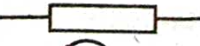

12 x 1 = 12

**I. Choose the correct answer:**

1. Choose the correct one
  - a) mm < cm < m < km
  - b) mm > cm > m > km
  - c) km < m < cm < mm
  - d) mm > m > cm > km
2. m/s<sup>2</sup> is the unit of .....
  - a) distance
  - b) displacement
  - c) velocity
  - d) acceleration
3. The unit of magnetic flux density is
  - a) weber
  - b) weber/metre
  - c) weber/metre<sup>2</sup>
  - d) weber.metre<sup>2</sup>
4. .... is used as reflectors in torchlight.
  - a) concave mirror
  - b) plane mirror
  - c) convex mirror
5. Among the following ..... is a mixture.
  - a) common salt
  - b) juice
  - c) carbon dioxide
  - d) pure silver
6. The term nucleons refer to .....
  - a) protons and electrons
  - b) only neutrons
  - c) electrons and neutrons
  - d) protons and neutrons
7. Bond formed between a metal and non metal atom is usually .....
  - a) ionic bond
  - b) covalent bond
  - c) dative bond
  - d) Co-ordinate bond
8.  $Zn + 2HCl \rightarrow ZnCl_2 + \dots \uparrow$ 
  - a) H<sub>2</sub>
  - b) O<sub>2</sub>
  - c) CO<sub>2</sub>
9. Mesoglea is present in .....
  - a) Porifera
  - b) Coelenterata
  - c) Annelida
  - d) Arthropoda
10. Smooth muscles occur in .....
  - a) uterus
  - b) Artery
  - c) vein
  - d) all of the above
11. The nutrient required in trace amounts to accomplish various body functions is .....
  - a) carbohydrate
  - b) protein
  - c) vitamin
  - d) fat
12. The organ affected by jaundice is .....
  - a) liver
  - b) lungs
  - c) kidney
  - d) brain

**II. Answer any 7 questions. (Question Number 22 compulsory) 7 x 2 = 14**

13. What do you know about pitch of screw gauge?
14. Distinguish distance and displacement?
15. Match the following

- |                    |  |
|--------------------|--|
| 1) Light bulb      | - a)  |
| 2) Fixed resistor  | - b)  |
| 3) Coil of wire    | - c)  |
| 4) Earth connector | - d)  |

16. Fill in the blanks
  - a) Noble gases belong to ..... group of the periodic table.
  - b) Example for liquid metal is .....
17. Draw the electron distribution diagram for the formation of carbon dioxide (CO<sub>2</sub>) molecule.



18. What is neutralization reaction? Give an example.

19. Give abbreviations for the following i) ISI ii) AGMARK iii) FCI iv) FSSAI

20. State whether true or false. If false correct the statement.

- Nitric acid in the stomach kills microorganisms in the food.
- During digestion, proteins are broken down into amino acids.

21. What is the consequence that occurs if all blood platelets are removed from the blood.

22. Find the oxidation number of the elements C in  $\text{CO}_2$

III. Answer any 7 questions (Question Number 32 compulsory):  $7 \times 4 = 28$

23. Differentiate mass and weight.

24. a) State Fleming's left hand rule.

b) What is meant by uniform circular motion? Give two examples of uniform circular motion?

25. a) Why does a helium balloon float in air?

b) State the laws of reflection of light.

26. Write the differences between elements and compounds and give an example for each.

27. a) Draw the structure of oxygen and sulphur atoms.

b) To match.

Groups	Families
1	Halogens
15	Noble gases
16	Chalcogen family
17	Nitrogen family
	Alkali metals

28. a) Explain octet rule with an example.

b) What are the uses of plaster of paris?

29. a) Pick out the odd one.

i) AIDS, Retrovirus, Lymphocytes and BCG.

ii) Bacterial disease, rabies, cholera, common cold and Influenza

b) Name the chronic disease associated with respiratory system.

30. a) Differentiate Kwashiorkor from Marasmus

b) i) The longest part of alimentary canal is .....

ii) The muscular and sensory organ which helps in mixing the food with saliva is .....

31. a) Mention the differences between stomatal and lenticular transpiration.

b) What is complex tissue? Name the various kinds of complex tissues.

32. A concave mirror produces three times magnified real image of an object placed at 7cm in front of it. Where is the image located.

IV. Answer all the questions:

$3 \times 7 = 21$

33. a) Derive the equation of motion by graphical method.

(OR)

b) i) List the safety features while handling electricity.

ii) Draw a neat diagram of an AC generator and explain its working.

34. a) i) Write any five uses of salts.

ii) Sulphuric acid is called "king of Chemicals" Why is it called so? (OR)

b) Explain the postulates of Bohr's atomic model.

35. a) i) List five characteristics features of fishes.

ii) Why do we sweat? (OR)

b) Suggest the immunization schedule for a new born baby till 12 months of age. Why it is necessary to follow the schedule.