KSHATRIYA VIDHYASALAMATRIC. HR. SEC. SCHOOL
Second Mid Term Exam November – 2024
SCIENCE

Time : 1.30Hours   **Marks: 50**   **Std: IX**   **Reg.No.:**

I. Choose the correct answers.   [10×1 = 10]

1) Resistance of a wire depends on_____.
   a) temperature   b) geometry   c) nature of material   d) all the above
2) Electroplating is an example for_____.
   a) heating effect   b) chemical effect   c) flowing effect   d) magnetic effect
3) Rubbing of comb with hair_____.
   a) creates electric charge   b) transfers electric charge
   c) Both A and B   d) None of these
4) Number of valence electron in carbon is _____.
   a) 2   b) 4   c) 3   d) 5
5) _____ compounds have high melting and boiling points.
   a) Covalent.   b) Coordinate.   c) Ionic.   d) chemical.
6) Transformer works on
   a) AC only   b) DC only   c) Both AC and DC   d) None of these
7) Which of the following converts electrical energy into mechanical energy?
   a) Motor   b) Battery   c) Generator   d) Switch
8) Which one of the following substance is not a constituent of sweat?
   a) Urea   b) Protein   c) Water   d) Salt
9) The structural and functional unit of the kidney is _____.
   a) villi   b) liver   c) nephron   d) ureter
10) Bile helps in the digestion of _____.
    a) proteins   b) sugar   c) fats   d) carbohydrates

II. Answer one or two sentences. (any SEVEN)   [7 × 2 = 14]

11) Define electric field.
12) i) The direction opposite to the movement of electron is called_____ current.
    ii) The domestic electricity in India is an ac with a frequency of _____ Hz.
13) Name any two appliances which work under the principle of heating effect of current.
14) Find the oxidation number of the elements in the following compounds.
           a) C in CO_2 b) Mn in $MnSO_4$
15) Explain Octet rule with an example.
16) State Fleming's Left Hand Rule.
17) i) The opening of the stomach into the intestine is called _____.
    ii) The longest part of alimentary canal is _____.
18) What is micturition?
19) **State whether true of false. If false, correct the statement.**
    (i) Nitric acid in the stomach kills microorganisms in the food.
    (ii)During digestion proteins are broken down into amino acids.
20) Why do we sweat?

III. Answer in brief. (Any THREE)   [3 × 4 = 12]

21) i) State Ohm's law.
    ii) Define magnetic flux density.

22) Fill in the following table according to the type of bonds formed in the given molecule.
    $CaCl_2$, H_2O, CaO, CO, KBr, HCl, CCl_4, HF, CO_2, Al_2Cl_6

Ionic bond	Covalent bond	Coordinate covalent bond

23) Name the types of teeth present in an adult human being. Mention the functions of each.

24) Write about the functions of kidney.

IV. Answer in detail. (Any TWO)   [2 × 7 = 14]

25) i) List the safety features while handling electricity. (4)

    ii) Differentiate step up and step down transformer. (3)

26) i) List down the differences between Ionic and Covalent compounds.(5)

    ii) Complete the table give below (2)

Element	Atomic number	Electron distribution	Valance electrons	Lewis dot structure
Lithium	3			
Boron	5			

27) Describe the alimentary canal of man.