** SINDHI HIGH SCHOOL, HEBBAL**

**PERIODIC TEST III 2023-24**

**SUBJECT: SCIENCE**

**MARKING SCHEME**

**Class: VIII**

**DATE: 05-02-2024 MAX MARKS: 30**

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| **Qn. NO** | **VALUE POINT** | **Marks** |
| 1. | c) One positive and other negative | **1** |
| 2. | b) formation of sperms | **1** |
| 3. | (c) Sodium | **1** |
| 4. | (b) Both A and R are true, and R is not the correct explanation of A. | **1** |
| 5. | (c) A is true but R is false | **1** |
| 6. | (a) Both A and R are true, and R is the correct explanation of A. | **1** |
| 7. | A lighting rod is an external terminal installed in a building or structure that aims to attract lightning to have a controlled point of impact and prevent it from striking an unwanted area or people.  The lightning-rod is an excellent conductor and thus allows the current to flow to ground without causing any heat damage. If the strike occurs near the lightning-rod system, the system will have a very low-resistance path and can divert the strike current to ground before it can do any more damage. | **1**  **1** |
| 8. | The oviparous animals reproduce by laying eggs and viviparous animals reproduce by giving birth to young ones.  One example of each category. | **1**  **½**  **½** |
| 9. | Rainwater contains dissolved salts. This makes it a conducting solution. There are no dissolved salts present in the distilled water. Hence, rainwater can allow electricity to pass through it while distilled water cannot. | **1**  **1** |
| 10. |  | **½+½**  **(drawing)**  **½ X 4**  **(labelling all the 4 steps)** |
| 11. | Cathode: a strip of iron metal or iron article  Anode: a strip of copper metal  At the anode: Cu(s) → Cu2+ (aq) + 2 e-‐  At the cathode: Cu2+ (aq) + 2 e-‐ → Cu(s). | **1**  **1+ 1** |
| 12. | **a) Galvanization**  is the process of applying a coating of zinc to iron by the entire immersion of the iron article into a bath of molten zinc to provide a solid, strong, and durable coating. It is not an electroplating process.  While **Chrome Plating** is an electroplating of chromium metal on iron articles.  b) Applications of chemical effects of electric current:  i) production of oxygen gas for medical purpose  ii) electroplating of metals over iron articles for prevention from corrosion.  iii) electroplating of superior metals like gold and silver over lower metals like copper and iron to make imitation jewelry.  iv) electrolytic refining of metals and obtaining metals in their pure form in metallurgy. | **½ + ½**  **½ x 4** |
| 13. | After intercourse the fusion of male and female gametes takes place in the fallopian tube. This process is called fertilization. First, the **zygote** becomes a solid ball of cells.  Fertilization results in the formation of zygote which begins to develop into an embryo. The zygote divides repeatedly to give rise to a ball of cells. The cells then begin to form groups that develop into different tissues and organs of the body. This developing structure is termed an **embryo**.  The embryo gets embedded in the wall of the uterus for further development. The embryo continues to develop in the uterus. It gradually develops the body parts such as hands, legs, head, eyes, ears, etc. The stage of the embryo in which all the body parts can be identified is called a **foetus**. When the development of the foetus is complete, the mother gives birth to the baby.  Menstruation is the breakdown of the uterus' endometrial lining and blood vessels, resulting in a liquid that is expelled through the vaginal canal. The menstrual flow lasts for three to five days. Menstruation occurs every 28/29 days in human females. If the released ovum is not fertilized, menstruation begins. | **3**  **2** |
| 14. | (a) Lightning is a naturally occurring electrostatic discharge in which two electrically active areas, one on the ground and one in the atmosphere, quickly neutralise each other.  (b) No, we should not carry an umbrella in a thunderstorm because thunderstorms are generally accompanied by lightning. Electric discharge from the clouds can travel through the metallic rod of the umbrella during lightning. This may give an electric shock to the person who is carrying it.  c) During lightning atmospheric electric charge may discharge through landline telephone wires and may become dangerous. Therefore it is safer to use a wireless telephone instead of a landline telephone during lightning. | **1**  **2** |