**SINDHI HIGH SCHOOL, HEBBAL**

**Half Yearly Examination [2023-24]**

**Subject: SCIENCE Answer Key**

**Class: VI Max. Marks: 80**

**Date:04 .09.2023**

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|  | **SECTION A** |  |
|  | MCQs |  |
| Q.NO | QUESTION | **MARKS** |
| 1 | a) Materials react with nitrogen in air to form a layer over it. | **1** |
| 2 | c) Diamond | **1** |
| 3 | b) Carbondioxide is released by plants at night. | **1** |
| 4 | d) Conduction of heat | **1** |
| 5 | b) i, iii | **1** |
| 6 | b) Earth worm | **1** |
| 7 | d ) Bluish black | **1** |
| 8. | c) Snail | **1** |
| 9. | b) Thigh bone | **1** |
| 10. | a) ovule | **1** |
| 11. | a) Ribs, muscles and loops helps move forward. | **1** |
| 12. | b) Snake A, more number of loops pushes it to move faster. | **1** |
| 13. | d) physical quantity and unit | **1** |
| 14. | a) meter and kilogram | **1** |
| 15. | (d) all bulbs will glow together | **1** |
| 16. | c) the filament is broken and the circuit is incomplete, therefore, current doesn’t flow through it. | **1** |
| 17. | a) Both A and R are true, and R is the correct explanation of A. | **1** |
| 18. | c) A is true but R is false. | **1** |
| 19. | b) Both A and R are true, and R is not the correct explanation of A. | **1** |
| 20. | b) Both A and R are true, and R is not the correct explanation of A. | **1** |
|  | **SECTION B** |  |
| 21. | a) Material that floats – leaf, plastic ball  Material that sinks – stone, key (any one each)  b) Honey initially sinks when dropped in water, then dissolves in water. | **½ x 2 =1**  **1** |
| 22. | a) Roots absorb minerals and water from the soil.  b) The plants lose out excess water through the stomata present in the leaves. | **1+1** |
| 23. | a) The plant has tap root.  b) This plant will have leaves with reticulate venation.  c) Mango, Tulsi, Tomato, etc (any two examples) | **½ x 4=2** |
| 24. | The various reasons may be: 1. Faulty or damaged measuring tape. 2. Improper technique of using the tape.  3. Improper positioning of the eye while taking the reading. 4. Using nonstandard units of measurement. (any two) | **1+1** |
| 25. | Conductors like metals are used in the making of wires, electric plugs and sockets while rubber and plastics are used in the making of coverings of electric wires, plug tops, switches, etc. (any one each) | **1+1** |
| 26. | Birds move through air smoothly as their body is adapted for it   1. It has a streamlined body to cut through the air currents. 2. It has the fore limbs modified into wings. 3. It has the hind limbs with claws modified into legs to perch on the support. 4. It has strong flight muscles attached to the wings to help them fly. 5. It has hollow bones to make the body light and enable them to fly.   (any two correct points) | **1+1** |
|  | **SECTION C** |  |
| 27 | a) As we go high up the mountain the amount of oxygen reduces, hence, oxygen cylinders are carried by mountaineers.  b) As the fine hair and mucus present in the nose prevents the dust particles from getting it into the respiratory system.  c) Volume of water doesn’t increase when salt is added to water as salt molecules take up the empty spaces between the water molecules. | **1**  **1**  **1** |
| 28 | a. Fig A will form a solution as sugar will dissolve completely in water.  b. After sometime in fig B the sand will sink to the bottom as it does not mix with water.  c. Oil will float on water and not mix with water as it is immiscible in water and oil is less denser than water. | **1**  **1**  **1** |
| 29. | Rose – Shrub – They have hard, brown stems, branches arise from the base of the plant. Mango – Tree – They are tall plants with thick hard stems, branches arise from the upper part of the plant.  Tomato – Herb – They are short plants with soft, green stems, with few lateral branches. | **½+½**  **½+½**  **½+½** |
| 30. | a) Heart and lungs are protected by the ribcage.  b) The ribs are attached to the chest bone or sternum in the front while it is attached to the backbone or vertebral column at the back.  c) The last two pairs are not attached to the sternum or the seventh pair of ribs in the front but are attached to the backbone at the back. | **½+½**  **½+½**  **½+½** |
| 31. | Yes, this can be done by arranging the components of the circuit as shown in the circuit diagram:  NCERT Exemplar Class 6 Science Chapter 12 Electricity and Circuits Img 12 In this arrangement, one terminal of the bulb should be connected directly to the positive terminal of the cell and the other terminal of the bulb should be connected to the negative terminal of the cell using the given piece of connecting wire. | **½**  **Diagram+**  **Arrows**  **½ x 4=2**  **½** |
| 32. | a) 1 metre 100 centimetre  Length of the pole is 100 x 4 m = 400m  b) (i) Rotatory motion (ii) Vibratory motion  (iii) Oscillatory motion (iv) Curvilinear motion | **½+½**  **½ x 4=2** |
| 33. | a) Photosynthesis.  b) Stomata. Carbon dioxide is required and oxygen is released in this process.  c) Chlorophyll. It helps to trap sunlight for photosynthesis. | **½**  **½+½+½**  **1** |
|  | **SECTION D** |  |
| 34 | a) A – Air occupies space B – Oxygen in air is essential for burning  b) i) Carbon dioxide  ii) 0.03%  iii) This gas is important in our life as it acts as a raw material for  photosynthesis which provides food for plants and animals. | **1+1**  **1**  **1**  **1** |
| 35. | a)  Hibiscus Flower Diagram  b) The important functions of the stem are  It bears the weight and supports the aerial parts of the plant.  It helps in transport of water and food to the different parts of the body. | Diagram 1  Labelling  **½ x 4=2**  **1+1** |
| 36. | a) Similarities \*The wheel of a bicycle and a ceiling fan moves in a rotational motion around a fixed axis.  [  Differences \* Bicycle changes its position but a ceiling fan does not change its position.  \* Bicycle can exhibit rectilinear motion but ceiling fan can’t exhibit rectilinear motion  b) Sewing machine – Movement of the wheel – Rotatory, Circular  Stitching of cloth – Rectilinear, Oscillatory, Periodic | 1  **½+½**  **½+½**  **½+½**  **½+½** |
|  | **SECTION E** |  |
| 37 | a. The one without any paint as it is transparent.  b. The window that was painted black as it has become opaque.  c. He will not be able to see everything clearly as the window pane is  painted light yellow in colour and has become translucent.  d. Turbid water, oil smeared paper, smoke, frosted glass (any two) | **1**  **1**  **1**  **½+½** |
| 38. | a) The points are called joints. The joint present at the elbow is the Hinge joint.  b) The joint present in the shoulder is the Ball and socket joint. It allows movement in all directions.  c) Fixed joints or immovable joints. Eg Bones of the Skull  d) Cartilage. It provides smooth frictionless movement. | **1**  **1**  **1**  **1** |
| 39. | a) Cheap, portable, produces small amount electricity, safe to handle (any two)  b) Two or more cells connected together is called a battery.  What is Dry Cell battery (Leclanché cell)? and main parts of dry cell  battery - YouTube | **1+1**  **Diagram &**  **Labelling**  **1**  **+**  **1** |