NAAHAR PUBLIC SCHOOL [CBSE] SENIOR SECONDARY SCHOOL
ACADEMIC YEAR (2022-2023)
ANNUAL EXAMINATION

STD:VII **TOTAL: 80**
SUBJECT:SCIENCE **DURATION: 3 Hrs**
Tr. INITIAL: Mrs R.ASWIN UDHAYA **DATE: 01.03.2023**

I. Fill in the blanks **(10x1=10)**

1. The blood from the heart is transported to all parts of the body by the _____
2. The rhythmic expansion and contraction of the heart is called the _____
3. Production of new individuals from the vegetative part of parent is called _____.
4. The transfer of pollen grains from the anther to the stigma of the same or of another flower of the same kind is known as _____.
5. Seed dispersal takes place by means of wind, _____ and animals.
6. Longer line in the symbol for a cell represents its _____.
7. When the current is switched 'on' in a room heater, it produces ____.
8. The safety device based on the heating effect of electric current is called a ____.
9. The fusion of male and female gametes is termed as _____.
10. Water reaches great heights in the trees because of suction pull caused by _____.

II.Choose the best answer **(10x1=10)**

1. In addition to the rock particles, the soil contains
(i) air and water (ii) water and plants (iii) minerals, organic matter, air and water (iv) water, air and plants
2. The water holding capacity is the highest in
(i) sandy soil (ii) clayey soil (iii) loamy soil (iv) mixture of sand and loam
3. In cockroaches, air enters the body through
(i) lungs (ii) gills (iii) spiracles (iv) skin
4. During heavy exercise, we get cramps in the legs due to the accumulation of
(i) carbon dioxide (ii) lactic acid (iii) alcohol (iv) water
5. Normal range of breathing rate per minute in an average adult person at rest is
(i) 9–12 (ii) 15–18 (iii) 21–24 (iv) 30–33
6. The mountaineers carry oxygen with them because:
(a) At an altitude of more than 5 km, there is no air.
(b) The amount of air available to a person is less than that available on the ground.
(c) The temperature of air is higher than that on the ground.
(d) The pressure of air is higher than that on the ground.
7. In plants, water is transported through
(i) xylem (ii) phloem (iii) stomata (iv) root hair
8. Water absorption through roots can be increased by keeping the plants
(i) in the shade (ii) in dim light (iii) under the fan (iv) covered with a polythene bag
9. The reproductive part of a plant is the
(i) leaf (ii) stem (iii) root (iv) flower
10. Bryophyllum can reproduce by its
(i) stem (ii) leaves (iii) roots (iv) flower

III.StateTrue or False **(8x1/2=4)**

1. An electric bell has an electromagnet.
2. When the electric current through the fuse exceeds a certain limit, the fuse wire melts and breaks.
3. During heavy exercise, the breathing rate of a person slows down.
4. Plants carry out photosynthesis only during the day and respiration only at night.
5. An electromagnet does not attract a piece of iron.
6. Fishes have lungs for respiration.
7. The size of the chest cavity increases during inhalation.
8. To make a battery of two cells, the negative terminal of one cell is connected to the negative terminal of the other cell.

IV.Match the following **(10x1/2=5)**

1. A home for living organisms	-	a. Yeast
2. Sandy soil	-	b. Absorption of water
3. Middle layer of the soil	-	c. Transport of water
4. Clayey soil	-	d. Gills
5. Diaphragm	-	e. Large particles
6. Fish	-	f. Lesser amount of humus

7. Xylem	-	g. Small particles and packed tight
8. Root hairs	-	h. Chest cavity
9. Phloem	-	i. All kinds of soil
10. Bud	-	j. Transport of food

V.Answer the following questions(any seven) **(7x2=14)**

1.Do you think an electromagnet can be used for separating plastic bags from a garbage heap? Explain.
2.How does the process of fertilisation take place in flowers?
3.Name any two effects of electric current.
4.When the current is switched on through a wire, a compass needle kept nearby gets deflected from its north-south position. Explain.
5. What will happen if there are no platelets in the blood?
6.What are the components of blood?
7.An electrician is carrying out some repairs in your house. He wants to replace a fuse with a piece of wire. Would you agree? Give reasons for your response.
8. What makes the blood look red?
9.Draw the circuit diagram to represent the circuit shown

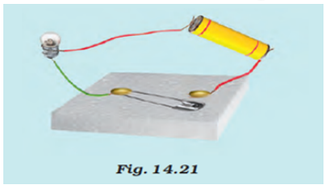


Fig. 14.21

VI.Answer the following questions(any four) **(4x3=12)**

1.In the circuit shown in Figure below
(i) Would any of the bulb glow when the switch is in the 'OFF' position?
(ii) What will be the order in which the bulbs A, B and C will glow when the switch is moved to the 'ON' position?

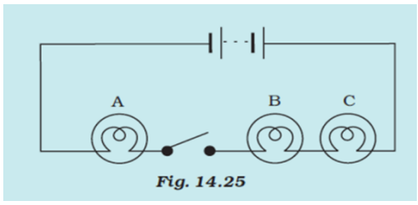


Fig. 14.25

2.Razia conducted an experiment in the field related to the rate of percolation. She observed that it took 40 min for 200 ml of water to percolate through the soil sample. Calculate the rate of percolation.
3. List the differences between clayey soil and sandy soil.
4.Why is blood needed by all the parts of a body?
5.State the main difference between asexual and sexual reproduction.
6.A simple pendulum takes 32 s to complete 20 oscillations. What is the time period of the pendulum?
7.The distance between two stations is 240 km. A train takes 4 hours to cover this distance. Calculate the speed of the train.

VII.Answer in Brief (any four) **(4x5=20)**

1. Explain how soil pollution and soil erosion can be prevented.
2.List the similarities and differences between aerobic and anaerobic respiration.
3. Describe the function of the heart with neat diagram
4.Describe the different methods of asexual reproduction. Give examples.
5.Describe the various ways by which seeds are dispersed.
6. A car moves with a speed of 40 km/h for 15 minutes and then with a speed of 60 km/h for the next 15 minutes. Find the total distance covered by the car ?

VIII.Draw and label **(2x2 1/2=5)**

1.Sketch the cross-section of soil and label the various layers.

2. Draw a diagram of the human excretory system and label the various parts.