## AL KHOZAMA INTERNATIONAL SCHOOL, DAMMAM <br> Affiliated to CBSE - New Delhi, Affiliation No. 5730008 <br> TERM-3- March, 2022-23 <br> WORKSHEET - 1 <br> GRADE: 7 <br> SUBJECT: SCIENCE

## CHOOSE THE CORRECT ANSWER

1. Which of these make up the female reproductive part of a flower?
a. Filament
b. Anther
c. Ovary
d. Style.
2. Choose all the statements that are true about an electric cell.
a. Electric cells convert chemical energy to electric energy.
a. An electric cell can run an electric iron.
b. All the electric cells can be reused again and again.
c. An electric cell is a source of electric current.
3. Choose the one that is not a primary colour
a. Red
b. Blue
c. Yellow
d. Green

## Assertion - Reasoning based questions.

These consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:
a) Both A and R are true and R is the correct explanation of A
b) Both A and R are true and R is not the correct explanation of A
c) A is true but $R$ is false
d) A is False but $R$ is true
4. Assertion- An electric iron works on the heating effect of electric current Reason-Some electrical appliances are made to heat up more, and we use the heat generated by them.
5. Assertion-Sepal protects the flower at the bud stage.

Reason-Petals attract insects.

## ANSWER THE FOLLOWING QUESTIONS(1 mark)

6. How is blue different from cyan, based on their colour type?
7. Renne ate a peach. Which part or layer of the fruit did she most likely eat?
8. What are electromagnets.
9. Why does a watermelon has only one seed, while a muskmelon has many seeds?

## ANSWER THE FOLLOWING QUESTIONS(2 mark)

10. Write 2 differences between the mesocarp of grapefruit and the mesocarp of pumpkin.

11. Why do we sometimes see a rainbow over a waterfall on a bright, sunny day?
12.Look at the picture showing the result of an experiment done with 3 bean seeds. Match the seeds with their result.


| Options | Answers |
| :--- | :--- |
| A. <br> Seed A | Germinated due to sufficient oxygen, <br> moisture, and suitable temperature |
| B. <br> Seed B | Did not germinate due to lack of sufficient <br> moisture |
| C. <br> Seed C | Did not germinate due to lack of sufficient <br> oxygen |

## ANSWER THE FOLLOWING QUESTIONS (3 mark)

13. Draw a venn diagram to show how primary colours of light mix to form white and secondary colours.
14. Some orchids are very difficult to propagate in natural conditions. How is tissue culture helpful in overcoming this problem with orchids?
15.Read the statement and answer the questions:
i. Explain what happens after this.
ii. What will happen to the ovary and ovule of the capsicum flower after fertilization?

## CASE BASE STUDY QUESTIONS (4 marks)

16.John and Sam made their electromagnets using a core of the same material and size. John wrapped 50 turns of wire around the core, while Sam wrapped 30 turns. Both of them connected the two open ends of the coils to a 9 V battery.
i. Whose electromagnet will be stronger and why?
ii. Write any two differences between an electromagnet and permanent magnet.
17.Flower X has big, colourful petals. It also produces a fragrance. The flower is bisexual.
i. Explain the pollination process in flower X.
ii. Mention the pollinating agents that are most likely to help in the pollination process.
18.Observe the diagram and answer the questions.

i. How are the bulbs connected in this circuit?
ii. What will happen if the second bulb fuses in the circuit?
iii. Draw the circuit diagram for the given circuit.
19.
i. Explain the process of sexual reproduction in a pine tree.
ii. How is fragmentation in mosses different from its sexual life cycle.(give two differences)
20.Look at the cross section of an electric cell and answer the questions.

i. What are the 2 parts of an electric cell that are connected in the electric circuit? Where are those 2 parts found in this cell?
ii. What is the rod in the middle made of and how is it important?
iii. What is the substance that fills the space between the rod and the case surrounding it? What is its significance?

# AL KHOZAMA INTERNATIONAL SCHOOL, DAMMAM 

Affiliated to CBSE - New Delhi, Affiliation No. 5730008
TERM-3- March, 2022-23
WORKSHEET - 2
GRADE:7
SUBJECT: SCIENCE

## Choose the correct answer

1. Which of these turns into an electromagnet in an electric bell?
i. Spring
ii. Contact screw
iii. Soft iron piece
iv. Iron strip.
2. Which of these is not a pollinating agent?
i. Wind
ii. Soil
iii. Water
iv. Insects.
3. Which of these materials should not be used as the core when making a strong electromagnet?
i. Soft iron
ii. Steel
iii. Wood
iv. Cobalt

Assertion - Reasoning based questions.
These consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:
e) Both $A$ and $R$ are true and $R$ is the correct explanation of $A$
f) Both A and R are true and R is not the correct explanation of A
g) $A$ is true but $R$ is false
h) A is False but $R$ is true
4. Assertion-Flowers bloom on the plant during fertilization

Reason-Flowers are the reproductive organs of flowering plants.
5. Assertion-Any colour can be formed by the primary colours of light.

Reason-Two colours that combine to form white light are called complementary colours.

## ANSWER THE FOLLOWING QUESTIONS(1 mark)

6. An object appears green in white light. What colour would it appear to be when seen in red light?
7. Define a solenoid.
8. Which two parts make up the stamen in a flower?
9. A humming bird helps in pollinating a flower.How are both the flower and humming bird benefitted from this process?

## ANSWER THE FOLLOWING QUESTIONS(2 marks)

10.Look at the pictures and answer the questions.

Method B

i. Which method of asexual reproduction is natural and which is artificial?
ii. How is the process of asexual reproduction different in both methods?
11. Match the parts of the flower with their functions

| A. | produces pollen |
| :--- | :--- |
| Ovary |  |
| B. | receives pollen |
| Anther |  |
| C. | produces ovules |
| Filament |  |


| D. | holds anther |
| :--- | :--- |
| Stigma |  |

12.Read the passage and choose if True or False.

When the connections of a battery in a circuit are reversed, the magnetic needle placed nearby shows a deflection but in the opposite direction, in comparison to the direction in which it deflected earlier.
a. The magnetic needle shows a deflection due to the magnetic effect of electric current.
i. True
ii. False
b. The direction of the magnetic field depends on the direction of electric current passing through a conductor.
i. True
ii. False

## ANSWER THE FOLLOWING QUESTIONS (3 mark)

13.Observe the diagram and answer the questions.

iv. How are the bulbs connected in this circuit?
v. What will happen if the second bulb fuses in the circuit?
14.Label the male and female reproductive organs of a flower in a neat labelled diagram.
15.
i. If a red laser beam is made incident on a prism, what would we see?
ii. Explain why would you see it?
iii. Draw a picture to show what would happen.

## CASE BASE STUDY QUESTIONS(4 marks)

16.Nora arranged asset up in which 2 current carrying loops are hung parallel to each other. She noticed that the two loops were attracting each other when current was flowing through them in the same direction and they were repelling each other when current was flowing in the opposite direction.
i. Name the principle..
ii. Name the Scientist who first noticed this principle.
iii. What can you conclude from this observation.
17. All seeds have a suitable temperature range within which they germinate. For example tomatoes germinate fast between $15-20^{\circ} \mathrm{C}$ while turnips germinate fast between $25-35^{\circ} \mathrm{C}$.
i. What are the other conditions required for germination?
ii. Do Cauliflower and okra seeds germinate in the same season?

## ANSWER THE FOLLOWING QUESTIONS (5 mark)

18.Look at the picture of a multi-pin extension cord, through which we can connect multiple devices. Answer the questions.

i. Which type of connection ensures the smooth functioning of all these devices - series or parallel? Explain why.
ii. What will happen if the devices are connected in series?
19. A reflected ray of light makes an angle of 20 degrees with the surface of a mirror.
i. What is the angle of incidence?
ii. What would be the angle of reflection.
iii. Show the calculation with the help of a diagram.
20.Look at the pictures showing the life cycle of 2 different non-flowering plants and answer the questions.

i. How is the sexual reproduction in ferns different from that in pines? Fill in the table.

| Feature | Fern | Pine |
| :--- | :--- | :--- |
| Location of male and <br> female reproductive <br> parts |  |  |
| Product of the fusion of <br> male and female sex <br> cells |  |  |

