

Q.1 Choose the best answer.

[25]

- i. The food is produced in the form of _____ during photosynthesis.
- A. Vitamins
 - B. Carbon
 - C. Sugar
 - D. Sodium
- ii. Carbon dioxide enters the leaf through _____.
- A. Stem
 - B. Roots
 - C. Stomata
 - D. Root hairs
- iii. The oxygen produced during photosynthesis is used for an essential life process called _____.
- A. Reproduction
 - B. Excretion
 - C. Digestion
 - D. Respiration
- iv. The sugar made by plants is stored in different parts of plants in the form of _____.
- A. Glucose
 - B. Starch
 - C. Vitamins
 - D. Maltose

- v. The energy stored in plants and animals is derived from the _____.
- A. Sun
 - B. Soil
 - C. Water
 - D. Air
- vi. The word photo means _____.
- A. Energy
 - B. Power
 - C. Chemical
 - D. Light
- vii. Insectivorous plants grow in soils which are _____.
- A. Rich in nutrients
 - B. Poor in nutrients
 - C. Rich in nutrients and aerated
 - D. Non-aerated
- viii. _____ is partially or wholly decayed animal or plant matter.
- A. Humus
 - B. Fertilizers
 - C. Soil
 - D. Clay
- ix. The dead bodies of animals and humans are broken down into simpler substances by _____.
- A. Viruses
 - B. Insects
 - C. Decomposers
 - D. Predators

- x. Flowering plants are dependent upon animals for _____.
- A. Budding
 - B. Reproduction
 - C. Food and shelter
 - D. Mates
- xi. The fruits of mimosa have _____ like structure that stick on the fur of passing animals.
- A. Hook
 - B. Hair
 - C. Seed
 - D. Both a and b
- xii. An eagle catches its prey with its _____.
- A. Sharp claws
 - B. Beak
 - C. Webbed feet
 - D. Flippers
- xiii. The adaptation for breathing in water
- A. Gills
 - B. Flippers
 - C. Webbed feet
 - D. Streamlined body
- xiv. _____ is a mixture of sodium bicarbonate and citric acid.
- A. Sugar
 - B. Vinegar
 - C. Fruit salt
 - D. Baking soda

- xv. When a sugar decomposes, it turns into _____ and water vapours.
- A. Nitrogen
 - B. Carbon
 - C. Glucose
 - D. Sucrose
- xvi. What happens to light when it hits a mirror?
- A. It gets dimmer
 - B. Its direction changes
 - C. It makes a shadow
 - D. It gets brighter
- xvii. What is light?
- A. What we see with our eyes
 - B. A form of work that reflects
 - C. A form of energy that travels in straight lines
 - D. A source that shines
- xviii. Which of the following would reflect the light best?
- A. Wooden table
 - B. Ceramic cup
 - C. Mirror
 - D. Plastic bottle
- xix. How are shadows formed?
- A. By light passing through an object
 - B. By an opaque object blocking the path of the light
 - C. By refracting the light
 - D. By light reflecting from a shiny object

xx. The main source of light is

- A. Sun
- B. Moon
- C. Stars
- D. Led lights

xxi. Materials that allow the light to pass through are

- A. Opaque objects
- B. Transparent objects
- C. Wood
- D. Rubber

xxii. An example of opaque material is

- A. Wood
- B. Glass
- C. Clear glass
- D. Both a and b

xxiii. In an open circuit, current will:

- A. Flow
- B. Not flow
- C. Increase
- D. Decrease

xxiv. Parallel circuits are useful because

- A. They require less wiring
- B. All other components keep working even when one fails
- C. They use less electricity
- D. Their battery works for a long period

xxv. The current can only flow through a _____.

- A. Open circuit
- B. Closed circuit
- C. Main circuit
- D. Sub open circuit

Q.2 Fill in the blanks

[/10]

- i. There are many tiny openings called _____ that allow gases to enter or leave.
- ii. Fertilizers which we obtain from living things such as animal dung, fish and compost are known as _____ fertilizers.
- iii. Small animals especially insects help plants in _____ and in dispersal of seeds.
- iv. The webbed feet of ducks and sharp claws of eagles are _____ that help them to survive in their habitats.
- v. Heat _____ can cause the ice to melt in the water.
- vi. When a material burns, it combines with _____ to form new materials.
- vii. Objects that do not produce light can be seen because they _____ light into our eyes.
- viii. Materials which allow most of the light to pass through are _____.
- ix. A _____ is used to close and open an electric circuit.
- x. A parallel circuit is the one which has more than _____ path through which an electric current can flow.

Q.3 Write 'True' or 'False', if false rewrite the correct statement by changing the underlined word. [/10]

i. Plants use nitrogen and water in the presence of sunlight to make food during photosynthesis.

ii. Nocturnal animals can see well at night because they have small eyes which are sensitive to light.

iii. Animals which eat both plants and animals are called herbivores.

iv. Mixing of sand and water is a reversible change.

v. Cooking of rice is a reversible change.

vi. Candles and lamps are natural sources of light.

vii. Transparent materials allow most of the light to pass through.

viii. The number of bulbs connected in series affects the brightness of the bulb.

ix. The numbers of batteries connected in series affects the brightness of the bulb as more current passes through the circuit.

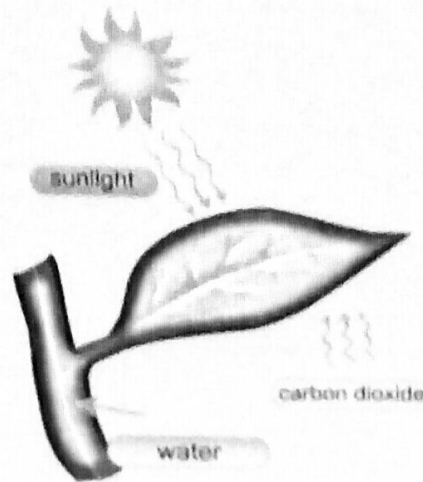
x. Changing the thickness of the wire can affect the amount of current passing through a circuit.

Q.4 Match the following. Read the terms given in Column A and match them with their correct interpretation in Column B. Write your final answer in column C. [/15]

Column A		Column B		Column C
1.	Starch	a.	organisms which break down the dead and waste matter	1. ____
2.	Iodine solution	b.	can cause a liquid to freeze	2. ____
3.	Decomposers	c.	shows food relationships among living organisms	3. ____
4.	Food chain	d.	used to test the presence of starch	4. ____
5.	Heat loss	e.	the excess sugar stored in leaves or parts of the plants	5. ____
6.	Light sensor	f.	the bouncing of light off a surface	6. ____
7.	Shadow	g.	objects that do not allow light to pass through	7. ____
8.	Reflection	h.	an electrical component used for opening and closing a circuit	8. ____
9.	Opaque	i.	a region of darkness formed when light is blocked	9. ____
10.	Switch	j.	an instrument used to measure brightness of light	10. ____
11.	Series circuit	k.	a path along which an electrical current flows	11. ____
12.	Copper	l.	circuit with more than one path through which an electric current can flow	12. ____
13.	Electric current	m.	circuit in which electrical components are arranged one after another	13. ____
14.	Parallel circuit	n.	a source of energy for in an electrical circuit	14. ____
15.	Battery	o.	a metal which is a good conductor of electric current	15. ____

Q.5 Look at the diagram below, and answer the following questions:

[8]



i. Define photosynthesis.

[1]

ii. Why do mostly leaves appear green? What is the role of the green pigment in the process of photosynthesis?

[2]

iii. What are the products formed as a result of photosynthesis?

[2]

iv. What will happen to a plant when it is kept in a dark cupboard?

[1]

v. State two functions of the root.

[2]

Q.6

[7]

a. Study the following food chain.

Grass \longrightarrow Grasshopper \longrightarrow Praying mantis \longrightarrow Toad

i. What does a food chain show?

[2]

ii. Identify the producer in the food chain. Where does it get its energy from?

[2]

iii. Is there a predator which is also a pray of another organism?

[1]

b. Define the following terms:

[2]

i. Carnivores

ii. Omnivores

Q.7

a. Define reversible and irreversible changes.

[5]
[2]

b. Classify the changes into two groups as reversible and irreversible changes.

[3]

i. Melting chocolate

ii. Mixing of egg shells with vinegar

iii. Cooking rice

Q.8

a.

[5]

i. Which form of energy enables us to see?

[/1]

ii. Why is the moon not a source of light?

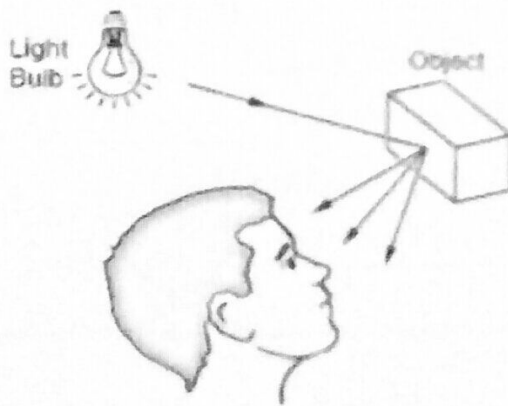
[/1]

iii. A mirror and a table do not give out light. How are you able to see them?

[/1]

b. How is Ali able to see the object? Explain.

[/2]



Q.9 Light is a form of energy which enables us to see things.

[6]

i. Name two natural sources of light.

[/2]

ii. Name two man-made sources of light.

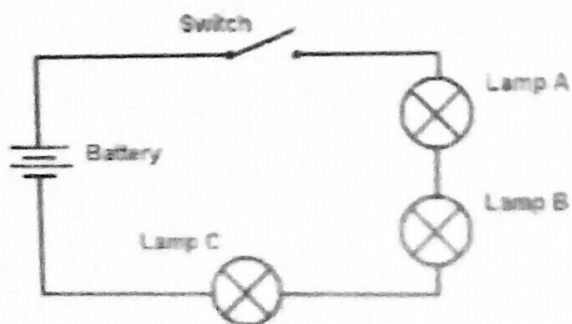
[2]

iii. What is reflection of light? What kind of surfaces reflects light better?

[2]

Q.10 Look at the diagram below and answer the following questions.

[4]



i. What type of a circuit is shown in this circuit diagram?

[1]

ii. Give reason for your answer.

[1]

iii. Do you think increasing the number of batteries in this type of circuit will change the brightness of the bulbs?

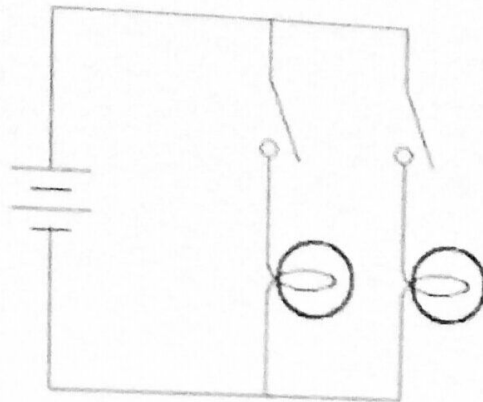
[1]

iv. What will happen to the amount of current when a thicker wire is used instead of a thin wire?

[1]

Q.11 Look at the circuit diagram and answer the following questions.

[5]



i. What type of a circuit is shown in the diagram?

[1]

ii. Give reason for your answer.

[1]

iii. Do you think that this type of circuit will keep working if one of the bulbs is broken?

[1]

iv. Draw a similar circuit diagram with one motor and three bulbs connected in the same type of circuit.

[2]
