



<b>GRADE:</b> VI	<b>SUBJECT:</b> SCIENCE	<b>DATE:</b>	<b>TIME:</b> 3HRS	<b>MARKS:</b> 60
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**Answer key**

**SECTION A**

**QI. MULTIPLE CHOICE QUESTIONS (16Q X 1M = 16M)**

- The filament of a bulb is made up of  
a. Aluminium      b. Copper      **c. Tungsten**      d. Gold
- What happens when a North Pole of a magnet is brought near another North Pole?  
a. They attract      **b. They repel**      c. They combine      d. Nothing happens
- Which of the following is a good conductor of electricity?  
a. a) Wood      b. Plastic      **c. Copper**      d. Rubber
- The device used to complete or break an electric circuit is called:  
a. Battery      b. b) Bulb      **c. Switch**      d. Wire
- Which of the following is an example of a non-luminous object?  
a. Sun      b. Torch      **c. Moon**      d. Candle
- Which of the following is an example of periodic motion?  
a. Running boy      **b. Swing of a pendulum**      c.. Rolling ball      d. Bird flying
- The main source of light on Earth is:  
a. Moon      b. Fire      **c. Sun**      d. Bulb
- Which part of a magnet has the strongest magnetic force?  
a. Centre      **b. Ends**      c. Middle      d. None.
- .The burning of fuel releases \_\_\_\_\_ .  
a. Oxygen      b. Nitrogen      **c. Carbon dioxide**      d. Argon
- The material that does not allow light to pass through is called:  
a.Transparent      b. Translucent      **c. Opaque**      d. None of these.
- To prevent electric shocks, the metallic electrical wires are insulated with  
a. Paper      b. Aluminium      c. Cotton      **d. Plastic**
- Which device is used to measure time accurately?  
a. Speedometer      **b. Stopwatch**      c. Barometer      d. Thermometer
- Which of the following is a female reproductive part of a flower.  
a. Anther      b. Filament      **c. Ovary**      d. Stamen
- The instrument used to measure electric current is called:  
**a. Ammeter**      b. Voltmeter      c. Thermometer      d. Galvanometer
- What type of motion does the hands of a clock show?  
a. Rectilinear      **b. Circular**      **c. Periodic**      d. Random
- The process of removing impurities from air is called:  
a. Filtration      b. Sedimentation      **c. Purification**      d. Evaporation

**SECTION B**

**QII FILL IN THE BLANKS (6Q X 1/2M = 3M )**

1. The process of measuring length using a standard unit is called **measurement**.
2. A shadow is always formed on the **opposite** side of the light source.
3. The earth's atmosphere contains approximately **21** % oxygen.
4. A freely suspended magnet always aligns in **North-south** directions.
5. One of the component of air used to manufacture fertilisers on a large scale is **Nitrogen**
6. Five kilometer is **5000** m.

**QIII TRUE/FALSE**

**(6Q X 1/2M = 3M)**

1. A cylindrical magnet has only one pole. **False**
2. Air contains both oxygen and carbon dioxide. **True**
3. A shadow is always colored. **False**
4. A bulb glows when the circuit is open. **False**
5. The speed of light is faster than sound. **True**
6. The smallest unit of measurement is a kilometer. **False**

**QIV. MATCH THE FOLLOWING.**

**(6Q X 1/2M = 3M)**

‘A’		‘B’
a) Magnet	<b>iv</b>	i) Shadows of celestial bodies
b) Eclipse	<b>i</b>	ii) A complete path for current
c) Battery	<b>vi</b>	iii) Inverted
d) Nitrogen	<b>v</b>	iv) Attracts iron
e) Pinhole image	<b>iii</b>	v) 78% of air
f) Circuit	<b>ii</b>	vi) Produces electricity

**QV. VERY SHORT ANSWER QUESTIONS.**

**(3Q X 2M = 6M)**

1. Draw a neat labeled diagram of an electric cell.



2. Write any two methods by which a magnet can be demagnetised.  
 Ans. : (1) By hammering the magnet strongly. (2) By heating a magnet strongly (3) keeping it in the east-west direction. (4) Dropping them from height.
3. Mention any two advantages of wind energy.  
 Ans. Uses of Wind Energy are: (i) Wind energy is used to pump the ground water. (ii) Wind energy is used to generate electricity with the help of windmills.

**SECTION C**

**QVI SHORT ANSWER QUESTIONS**

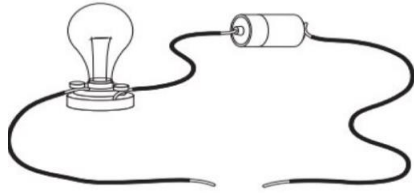
**(Any 5)**

**(5Q X 3M =15M)**

1. Why should we have standard unit of measurement? Explain giving an example.  
 Ans. We need standard units of measurement because the unit like handspan, foot, cubit differ from person to person or even different countries. So, for a uniform measurement, standard unit of

measurement is really required to:- a. Avoid confusion. b. To maintain accuracy and uniformity.

2. Look at the diagram showing an incomplete circuit with two open ends.



*Objects: wooden stick, metal key, rubber, and a glass bangle, scale, paper clip, iron nail.*

- a) Which of the given objects will complete the circuit and allow the bulb to glow?

Ans. Metal key, paper clip and iron nail.

- b) Categorize the objects as conductors and insulators.

Ans. Conductors: Metal key, Paper clip, iron nail, Scale(iron,steel)

Insulators: Wooden stick, Glass bangle, Scale(wooden,plastic), rubber.

- c) Why are conductors useful in making electric circuits?

Ans. Conductors are useful in making electric circuits because they allow electricity to flow through them easily.

3. Draw any three types of magnet and name them.

Ans.



4. List any three activities that are possible due to the presence of air.

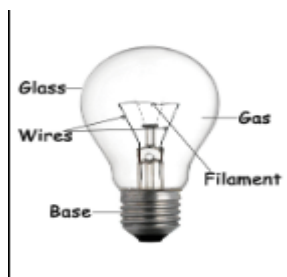
Ans. :1. All living beings use air for respiration. 2. Plants use air (carbon dioxide) to prepare their food.

3. Blowing air (wind) is used for power generation by wind mills. 4. Air helps in burning of fuels and substances. 5. Air helps in the scattering of seeds and pollens of plants. 6. Air helps in the movements of sailing yachts, gliders, parachutes and aero planes.

5. Write any three properties of magnets.

Ans. Properties of magnet are: i) A magnet has two poles, north pole and south pole. ii) When a magnet is suspended freely it always rest in north south direction. iii) The force of attraction is more concentrated at the poles of a magnet. iv) Opposite poles of magnets attract and similar poles repel.

6. Draw a neat labeled diagram of an electric bulb.



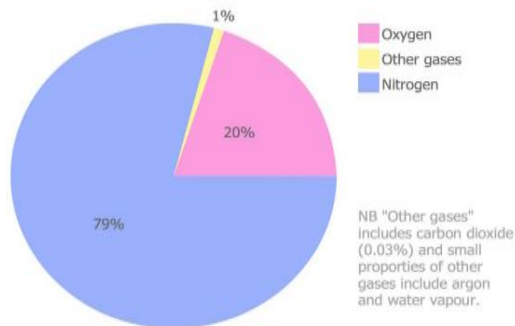
## SECTION D

## QVII LONG ANSWER QUESTIONS

(2Q X5M = 10M)

1. (a) What is the composition of air. Draw a pie chart to show the composition of air.

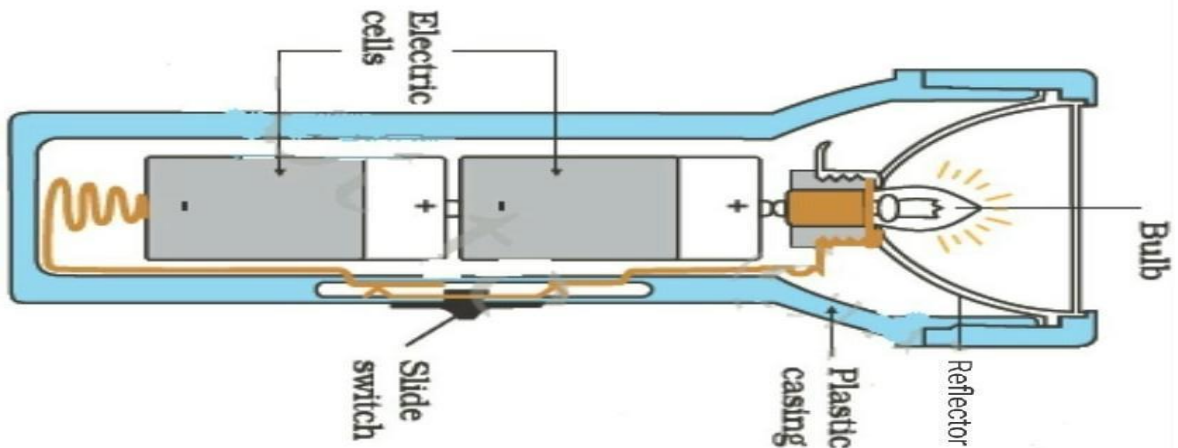
Ans. Air is the mixture of gases. The gases in air are mainly nitrogen, oxygen, small amount of carbon dioxide, and many other gases. In fact, nitrogen(78%) and oxygen(21%) together make up 99% of the air. The remaining 1% is constituted by carbon dioxide and a few other gases, water vapour and dust particles.



- (b) Why is carbon dioxide gas used to extinguish fire?

Ans. : It is because carbon-dioxide does not support combustion. When sprayed on burning object it stops the supply of oxygen and extinguishes fire.

2. Draw inside view of a torch and label the parts.



Ans.

## SECTION E

### QVIII CASE BASED QUESTION

(1Q X4M = 4M)

Riya was playing outside in the evening and noticed that her shadow was very long. The next day, at noon, she saw that her shadow was very short. She was curious and asked her teacher why this happened.

Later, Riya did a fun activity with a torch. She placed different objects in front of the light—one glass, one sheet of paper, and a wooden block. She observed that some objects made a clear shadow, some

made a faint shadow, and some did not make a shadow at all.

1. Riya's shadow was long in the evening and short at noon.

Which of the following statements is the correct statement?

(a) **In the evening and morning the sun is low in the sky and at noon, the sun is directly overhead.**

(b) In the noon the sun is low in the sky and in morning and evening it is overhead

2. Which object made a clear shadow—the glass, paper, or wooden block? Why?

Ans. The wooden block made a clear shadow because it is opaque and does not allow light to pass through it.

3. What kind of shadow do you think the paper made? Explain.

Ans. The paper made a faint shadow because it is translucent—it allows some light to pass through but not completely

4. What is needed to form a shadow? Choose the correct option.

(a) Only a light source

(b) A light source and object

(c) **A light source, opaque object and surface.**

(d) Only a surface