

BLUEPRINT OF SCIENCE WEEKLY TEST

CLASS VIII

S.No.	Types of question	No. of questions	marks	total
1	Multiple choice questions	4	1	4
2	Correct the incorrect statements	4	1	4
3	Give one word	4	1	4
4	Value based	1	3	3
5	Very short	5	2	10
6	Short answer	5	3	15
7	Long answer	5	5	10
	Total			50

DELHI PUBLIC SCHOOL, BAHADURGARH
FIRST SEMESTER ASSESSMENT CLASS: VIII
SUBJECT: G. SCIENCE

(SET-1)

TIME: 3 hours

Pg. No.- 03

M.MARKS: 90

GENERAL INSTRUCTIONS:

- Students are required to write their name, section and roll number on the question paper. Nothing else should be written on the question paper.
- All questions are compulsory.
- Attempt all questions in each section before going on to the next section.
- All answers must be correctly numbered as in the question paper in the answer sheet provided to you.
- Marks of all questions are mentioned.
- Number of supplementary sheets taken should be mentioned in the main sheet.

Section – A

I. Choose the correct option in each of the following:-

(10X1=10)

- Yeast is used in the production of
(a) sugar (b) alcohol (c) hydrochloric acid (d) oxygen
- The following is an antibiotic
(a) Sodium bicarbonate (b) Streptomycin (c) Alcohol (d) Yeast
- Rayon is different from synthetic fibres because
(a) it has a silk-like appearance.
(b) it is obtained from wood pulp.
(c) its fibres can also be woven like those of natural fibres.
- If no force acts on a body, it will
a) break b) get deformed
c) move with increasing speed d) either remain at rest or move with same speed
- Due to incomplete combustion, a fuel gives out
a) blue flame b) yellow flame c) green flame d) black flame

6. Stoppage of mensuration is known as
a) menarche b) menopause c) puberty d) none
7. Which of the following is not the property of plastic
a) inflammable b) corrode and rust easily
c) poor conductor of electricity d)
8. Egg of a hen represent a
a) single cell b) double cell c) multicelled d) none
9. Adolescents should be careful about what they eat, because
a) proper diet develops their brains.
b) proper diet is needed for rapid growth taking place in their body.
c) adolescent feel hungry all the time
d) taste buds are well developed in teenagers.
10. Which of the following is the unit of pressure
a) metre b) newton c) pascal d) square newton

II. Fill in the blanks

(10X0.5=5)

1. During complete combustion of a fuel, _____ gas is formed.
2. Robert Hook discovered the _____
3. During electroplating, a metal is deposited on the _____ electrode.
4. Mode of transfer of malaria is _____
5. Cell wall is formed of _____
6. The disease causing microorganisms are called _____
7. Endocrine glands has _____ glands.
8. Bakelite and melamine are the examples of _____
9. The lowest temperature at which a substance catches fire _____
10. _____ stimulates growth and development of the body.

III. Identify the incorrect word and give the correct statement.

(5X1=5)

1. Microbes are always friendly to us.
2. SI unit of calorific value is J/kg.
3. The ray falls on mirror is called reflected ray.
4. Burning of fossil fuels may lead to acid rain.
5. The basic living unit of an organism is an organ.

IV. Give one word-

(10X1=10)

1. A type of special fibre used for making parachutes.
2. The zone in a candle flame is the zone of no combustion.
3. Chemical substance that act like chemical messengers.
4. A poisonous gas formed on excessive burning of coal and diesel.
5. The coloured part of eye.

6. Bacteria present in milk.
7. A unit of inheritance of living organisms.
8. A hormone helps in balancing the sugar level in the body.
9. The perpendicular drawn on at the point of incidence.
10. The solution which is used to conduct the process of electroplating.

Section – B

V. Each question carries 2 marks

(2X6=12)

1. What is electroplating? Give two applications of it.
2. How sex determined in human? Only by flow chart.
3. What do you understand by the term bacteriocidal and bacteriostatic?
4. Why is mitochondria called the power house of cell?
5. State the characteristics of the image formed by plane mirror.
6. List four characteristics of good fuel.

VI. Each question carries 3 marks.

(3X8=24)

1. What is antibiotics? What precaution should be taken while taking antibiotics?
2. Explain the different zones of a candle flame with the help of a diagram.
3. Write a short note on nucleus.
4. Mention the any three changes in brief that takes place during puberty age.
5. Give reasons-
 - a) Astronauts wear special suits when the go into the space.
 - b) Broad strap exert less pressure than thin strip.
 - c) Camel can walk easily on sand.
6. Name the microorganisms which can fix atmospheric nitrogen in the soil. Explain their role in nitrogen cycle.
7. How do ciliary muscles affect the functioning of eye? List the function of rods and cones.
8. Draw a ray diagram to explain the laws of reflection.

VII. Each question carries 5 marks

(5X4=20)

1. a) Draw a neat and well labeled diagram to show the structure of plant cell.
b) List three differences between plant and animal cell.
(3+2)
2. Describe an activity to that pressure in liquid remain same at same distance. Also draw the suitable diagram. (3+2)
3. 10 Write lines on the usefulness of microorganisms in our lives. (5)
4. a) A block of size 20m X10m X 5m has a mass 22 kg. Calculate the pressure exerted by block on a ground in position when 20m x10m .
b) Give one example of each to indicate that force may change
 - i) The shape of body.
 - ii) Produce motion on a body.

(3+2)

VIII. Value based questions

(4)

1. Mohit's school bag had narrow straps. So when he carried it, he felt uncomfortable. When he told his father about this problem, his father bought him a bag having broad straps.
- Why was Mohit feeling uncomfortable in carrying the bag with narrow straps?
 - Write any other application based on this principle.
 - Which values were shown by Mohit's father?
-

DELHI PUBLIC SCHOOL, BAHADURGARH
FIRST SEMESTER ASSESSMENT 2015-16
CLASS: VIII
SUBJECT: G. SCIENCE (Answer key)

(SET-1)

TIME: 3 hours

Pg. No.- 03

M.MARKS: 90

GENERAL INSTRUCTIONS:

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- Marks of all questions are mentioned.
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Section – A

I. Choose the correct option in each of the following:-

(10X1=10)

- Yeast is used in the production of
(a) sugar (b) **alcohol** (c) hydrochloric acid (d) oxygen
- The following is an antibiotic
(a) Sodium bicarbonate (b) **Streptomycin** (c) Alcohol (d) Yeast
- Rayon is different from synthetic fibres because
(a) it has a silk-like appearance.
(b) **it is obtained from wood pulp.**
(c) its fibres can also be woven like those of natural fibres.
- If no force acts on a body, it will
a) break b) get deformed
c) move with increasing speed **d) either remain at rest or move with same speed**
- Due to incomplete combustion, a fuel gives out

- a) blue flame b) yellow flame c) green flame d) **black flame**
6. Stoppage of mensuration is known as
a) menarche b) **menopause** c) puberty d) none
7. Which of the following is not the property of plastic
a) inflammable b) **corrode and rust easily**
c) poor conductor of electricity
8. Egg of a hen represent a
a) **single cell** b) double cell c) multicelled d) none
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a) proper diet develops their brains.
b) **proper diet is needed for rapid growth taking place in their body.**
c) adolescent feel hungry all the time
d) taste buds are well developed in teenagers.
10. Which of the following is the unit of pressure
a) metre b) newton c) **pascal** d) square newton

II. Fill in the blanks

(10X0.5=5)

- During complete combustion of a fuel, **carbon di oxide** gas is formed.
- Robert Hook discovered the **cell**
- During electroplating, a metal is deposited on the **negative** electrode.
- Mode of transfer of malaria is **vector**
- Cell wall is formed of **phospholipids**
- The disease causing microorganisms are called **pathogen**
- Endocrine glands has **_ductless_** glands.
- Bakelite and melamine are the examples of **thermosetting**
- The lowest temperature at which a substance catches fire **ignition temperature**
- hormone** stimulates growth and development of the body.

III. Identify the incorrect word and give the correct statement.

(5X1=5)

- Microbes are **sometime** friendly to us.
- SI unit of calorific value is **KJ/kg**.
- The ray falls on mirror is called **INCIDENT** ray.
- Burning of fossil fuels may lead to **GLOBAL WARMING**
- The basic living unit of an organism is an **CELL**.

IV. Give one word-

(10X1=10)

- A type of special fibre used for making parachutes. **NYLON**
- The zone in a candle flame is the zone of no combustion. **LUMINOUS**
- Chemical substance that act like chemical messengers. **HORMONES**
- A poisonous gas formed on excessive burning of coal and diesel. **CARBON MONO OXIDE**
- The coloured part of eye. **IRIS**

6. Bacteria present in milk.**LACTOBACILLUS**
7. A unit of inheritance of living organisms.**GENE**
8. A hormone helps in balancing the sugar level in the body.**INSULIN**
9. The perpendicular drawn on at the point of incidence.**NORMAL**
10. The solution which is used to conduct the process of electroplating.**ELECTROLYTE**

Section – B

V. Each question carries 2 marks

(2X6=12)

1. What is electroplating? Give two applications of it.

1. The break down of chemicals in presence of electricity. 2 examples any	1+0.5+0.5
2. On the basis of XX and XY Chromosomes. Flow chart	1+1
3. bacteriocidal KILLING OF BACTERIA Bacteriostatic SLOW DOWN THE GROWTH OF BACTERIA	1+1
4. It helps in synthesis of energy. Energy is stored in form of ATP	2
5. A) lateral inversion B) Image at same distance C) Image is real D) Image is inverted	0.5X4
ANY FOUR 1. No residue left 2. Eco friendly 3. Easily transportable 4. Low ignition temp. 5. High calorific value	0.5X4

VI. Each question carries 3 marks.

(3X8=24)

1		
2	Ref pg-95 + DIAGRAM	2+1
3	Diagram and explanation of nucleus	1.5+1.5
4		2+1
5	a) Because atmospheric pressure in space is more b) More area less pressure c) More area less pressure	1x3
6	Definition and explanation diagram	1+1+1
7	helps in power of accommodation Cone rods	1x3
8	Ref pg 202 fig. 16.5 ncert	3

VII. Each question carries 5 marks

(5X4=20)

1.

Diagram with labeling	2+3
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Differences Cell wall, chloroplast vacuoles large	
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2.

Diagram Procedure, observation and result.	2+3
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3. any. (0.5x10=5)

4. a $P = F/A$ ANS 100N/M² (1+2)

b) Give one example of each to indicate that force may change

i) any example (1)

ii) ANY EXAMPLE(1)

(3+2)

VIII. Value based questions

(4)

A) MORE PRESSURE(1)

B) BLUNT KNIFE(1)

CARING RESPONSIBLE, UNDERSTANDING(1)

DELHI PUBLIC SCHOOL, BAHDURGARH
FINAL TERM EXAMINATION Sample Paper
SUBJECT: GENERAL SCIENCE (SET-1)
CLASS:VIII

MM:90

DATE:

TIME:3Hrs

P.S.:03

General Instructions:

- i) All the questions are compulsory.
- ii) The paper consists of five sections.
- iii) Attempt the questions section wise.

SECTION-A

I Choose the correct answer :-

(1X5=5)

1) Which of the following is a chemical fertilizer?

- a) compost b) bark of neem c) NPK d) vermicompost.

2) After fertilization the ovum implants itself in the

- a) ovary b) uterus c) vagina d) vas deferens

3) The Halley's comet comes close to sun once every

- a) 176 years b) 76 years c) 67 years d) 760 years.
- 4) The most common scale used to measure magnitude of an earthquake
a) seismic zone b) fault zone c) richter scale d) seismograph
- 5) Sound wave with a frequency below 20Hz called
a) infrasonic b) ultrasonic c) ultrasound d) none

II Give one word:-

(1X10=10)

- 1) The process of placing seeds in a soil.
- 2) The thread like structure inside the nucleus which carries information in the form of genes.
- 3) The positively charge particles in an atom.
- 4) The body burning like a star and coming towards the earth.
- 5) The unit of frequency.
- 6) The animals which give birth to young ones.
- 7) The planet known as morning and evening star.
- 8) The force opposite to applied force.
- 9) The maximum displacement of sound wave.
- 10) The surface of the earth is made up of plates that moves one above the another.

III State that following statement is true or false, if false give the correct statement.

(1x5=5)

- 1) Coal can be drawn into wire.
- 2) Copper displaces zinc from zinc sulphate.
- 3) Coke is a pure form of coal.
- 4) A new human individual develops from a cell called gametes.
- 5) Pole star is the member of solar system.

IV Fill in the blanks:-

(1x10=10)

- a) Weedicides sprayer should cover their _____ and _____ with a piece of cloth during spraying of these chemicals.
- b) Continuous growing of crops makes the soil _____
- c) All metals are good conductor of _____ and _____.
- d) Coal is also called as _____.
- e) When heated in Air, Coal burns and produces _____ gas?
- f) Friction opposes the _____ between the surfaces in contact with each other.
- g) Sound is produced by _____ objects
- h) _____ is caused by the accumulation of charges in the cloud.

SECTION B

V SHORT ANSWER QUESTIONS

(2X 8=16)

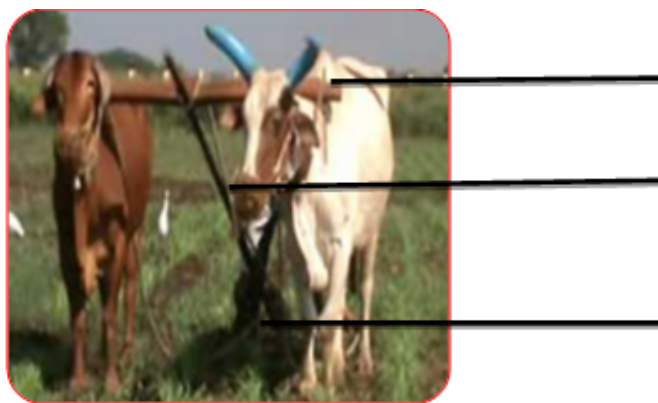
1. When we beat a coal its shape do not changed, rather is break down into small pieces. Why ?
2. Why sliding friction is slightly smaller than static friction?
3. What are the common difference between zygote and embryo?
4. Why loosened soil is important for cultivation of crops?
5. Why we use Aluminium foil to wrap food items?
6. What are the advices of PCRA to save petrol/diesel while driving?
7. How is sexual reproduction more beneficial than asexual reproduction?
8. How was Petroleum formed?

SECTION C

VI SHORT ANSWER QUESTIONS

(3X7=21)

1. Label the following diagram and write their function:



2. Give reason why copper cannot displace zinc from its salt solution, and why sodium and potassium are stored in kerosene.
3. Differentiate between exhaustible and inexhaustible resources.
4. Explain why friction is a necessary evil?
5. Write short notes on-
- a) Ursa Major
 - b) Orion
6. Draw sketches to show relative position of prominent stars in Orion.
7. Draw a labelled diagram of human male reproductive organ.

SECTION –D

VII VALUE BASED QUESTION:-

(1X3=3)

In your society, one of your friends is bursting crackers and playing loud music to celebrate India's victory in the cricket match.

- a) Name type of pollution.
- b) How does it can be controlled?
- c) Do you think it is a correct way of celebration? Why/Why not? (1+1+1)

SECTION –E

VIII LONG ANSWER QUESTIONS:-

(5X4=20)

- 1.a) How could you separate good and healthy seeds from the damaged ones? (2+3)
- b) What are the advantages of a seed drill used for sowing? (3+2)
- 2. Explain reaction between sulphur and oxygen. What is the nature of its oxide formed?
- 3. a) A pendulum oscillates 50 times in 6 seconds. Find its time period and frequency.

- c) Sound travels through a medium, it cannot travel in vacuum". Justify the statement. (2+3)
4. Explain the principle and working and of electroscope. (5)

-----X-----

DELHI PUBLIC SCHOOL, BAHDURGARH
FINAL TERM EXAMINATION 2015-16
SUBJECT: GENERAL SCIENCE (SET-1)
CLASS:VIII (ANSWER KEY)

MM:90

TIME:3Hrs

General Instructions:

- iv) All the questions are compulsory.
- v) The paper consists of five section.
- vi) Attempt the questions section wise.

DATE:

P.S.:

SECTION-A

- I Choose the correct answer :- 1X5=5
- 1) Which of the following is a chemical fertilizer?
a) compost b) bark of neem c) **NPK** d) vermicompost.
 - 2) After fertilization the ovum implants itself in the
a) ovary b) **uterus** c) vagina d) vas deferens
 - 3) The Halley's comet comes close to sun once every
a) 176 years b) **76 years** c) 67 years d) 760 years.
 - 4) The most common scale used to measure magnitude of an earthquake
a) seismic zone b) fault zone c) **richter scale** d) seismograph
 - 5) Sound wave with a frequency below 20Hz called
a) **infrasonic** b) ultrasonic c) ultrasound d) none
- II Give one word:- 1X10=10

- 1) The process of placing seeds in a soil.**SOWING**
 - 2) The thread like structure inside the nucleus which carries information in the form of genes.**CHROMOSOMES**
 - 3) The positively charge particles in an atom.**PROTON**
 - 4) The body burning like a star and coming towards the earth.**METEORS**
 - 5) The unit of frequency.**HERTZ**
 - 6) The animals which give birth to young ones.**VIVIPAROUS**
 - 7) The planet known as morning and evening star.
 - 8) **friction**
 - 9) The maximum displacement of sound wave.**AMPLITUDE**
 - 10) The surface of the earth is made up of plates that moves one above the another.**TECTONIC**
- III State that following statement is true or false, if false give the correct statement. 1x5=5
- 1) Coal can be drawn into wire.**Coal cannot be drawn into wire**
 - 2) Copper displaces zinc from zinc sulphate.**Copper cannot displaces zinc from zinc sulphate**
 - 3) Coke is a pure form of coal.TRUE
 - 4) A new human individual develops from a cell called gametes.**ZYGOTE**
 - 5) Pole star is the member of solar system.**NOT a member of solar system.**
- IV Fill in the blanks:- (1x10=10)
- i) Weedicides sprayer should cover their **mouth** and **hand** with a piece of cloth during spraying of these chemicals.
 - j) Continuous growing of crops makes the soil **infertile**
 - k) All metals are good conductor of **heat** and **electricity**.
 - l) Coal is also called as **fossil fuel**.
 - m) When heated in Air, Coal burns and produce **hydrogen** gas
 - n) Friction opposes the **forces** between the surfaces in contact with each other.
 - o) Sound is produced by **vibrating** objects
 - p) **Lightening** is caused by the accumulation of charges in the cloud.

SECTION B

- V SHORT ANSWER (2X 8=16)
1. When we beat a coal its shape do not changed, rather is break down into small pieces, why so?.
Because coal is non-metal and it is not malleable.
 2. Why sliding friction is slightly smaller than static friction?
Sliding friction is slightly smaller than static friction because two sliding objects find less time to get interlocked against each other's irregularities of surfaces as a result of which they experience less friction.
 3. What are the common difference between zygote and embryo?
Zygote: Single fertilizes egg and found in oviducts.

Embryo: Ball of cells and gets embedded in the wall of uterus for development.

4. Why loosened soil is important for cultivation of crops?

The first step before growing a crop plant is the preparation of soil for sowing of seeds, the soil has to be loosened so that the roots of plants may penetrate deep into the soil, the loosening of soil allow the roots to breathe easily because loosened soil promotes growth of organisms like earthworms and microbes which are the farmer friends as they further turns and loosen the soil and add humus to it, apart from this turning and loosening of soil brings the nutrient rich soil to the top and the top layer of soil supports plant growth, thus nutrient rich soil at the top layer helps in good and healthy crop and hence turning and loosening of soil is very important for cultivation of crops. The process of loosening and turning of the soil is called tilling or ploughing and is carried on by using a plough.

5. Why we use aluminium foil to wrap food items?

The property of metals by which they can be beaten into thin sheets, is called malleability. Aluminium is a metal. Aluminium foils are made by using this property of aluminium. They keep food items warm and prevent them from getting contaminated.

6. What are the advices of PCRA to save petrol/diesel while driving?

1. Drive at a constant and moderate speed as far as possible
2. Switch off the engine at traffic lights or at a place where you have to wait
3. Ensure correct type pressure
4. Ensure regular maintenance of the vehicle.

7. Why is the sexual reproduction more beneficial than asexual reproduction?

Because in sexual reproduction variation occur which is not possible in asexual reproduction.

8. How was Petroleum formed?

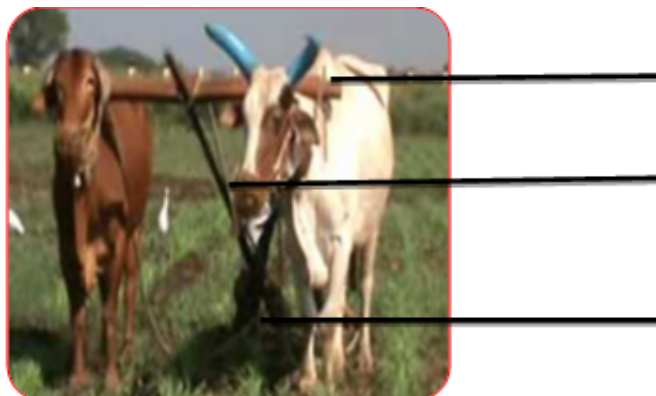
Petroleum was formed from organisms living in the sea. As these organisms died, their bodies settled at the bottom of the sea and got covered with layers of sand and clay. Over Millions of years in absence of air and under high temperature and high pressure the dead organisms get transformed into Petroleum and natural Gas.

SECTION C

VI ANSWER THE FOLLOWING QUESTION IN 50 WORDS

(3X7=21)

1. Label the following diagram and write their function:



2. Give reason why copper cannot displace zinc from its salt solution, and why sodium and potassium are stored in kerosene.

Copper cannot displace zinc from its salt solution: because Zinc is more reactive than copper. A more reactive metal can replace a less reactive metal, but a less reactive one cannot replace a more reactive metal. Therefore Copper cannot displace zinc from its salt solution. Sodium and potassium are stored in kerosene because Sodium metal is very reactive. It reacts vigorously with oxygen and water. A lot of heat is generated in the reaction. It is, therefore, stored in kerosene.

3. Differentiate between exhaustible and inexhaustible resources.

The resources which are present in unlimited quantity in nature and are not likely to be exhausted by human activities are known as Inexhaustible Resources. For Example: Sunlight, air

All resources which are found in a limited quantity in nature are known as Exhaustible resources. They can be exhausted by human activities. Example of these resources is Forests, Minerals, Coal, Petroleum, Natural Gas etc.

5. Explain why friction is a necessary evil?

Friction is very important for us it helps in: It allows us to walk comfortably, It allows us to grip and catch other objects. Things do not move from their places because of the friction. Speeds of moving objects can be controlled due to friction only. But apart from this friction is considered as an evil because; it causes wear and tear in objects of our daily use including machines. It makes movement of heavy objects very difficult. We need to spend a lot of time and money for the maintenance of various machines in order to keep their friction low.

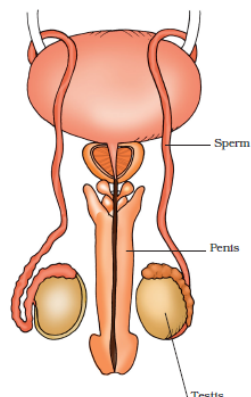
6. Write short notes on-
Ursa Major
Orion

- a. Ursa Major: Ursa Major can be seen in the sky during summer time in the early part of the night, it is also known as Big Dipper or Saptarashi. There are seven prominent stars in this constellation; it appears like a big question mark or ladle.
- b. Orion: Orion can be seen in the sky during winter in the late evenings. It has seven or eight stars. The brightest star Sirius is located close to the Orion.

7. Draw sketches to show relative position of prominent stars in Orion.



8. Draw a labelled diagram of human male reproductive organ.



SECTION –D

VII VALUE BASED QUESTION:- (1+1+1)

- 1.a) noise pollution
- b) &c) acc to students view.

SECTION –E

VIII LONG ANSWER QUESTIONS:- (5X4=20)

- 1.a) How could you separate good and healthy seeds from the damaged ones?
- b) What are the advantages of a seed drill used for sowing? (2+3)

a) Take a beaker half filled with water and put some seeds into it and stir well, wait for some time. You will observe some seeds sink in water while some seeds float in water, damaged seeds become hollow and lighter and thus they float on water.

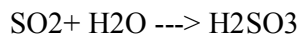
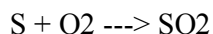
b) As we know metals react with acids and produce metal salts and hydrogen gas, aluminium is a metal and lemon contains citric acid. So if we store lemon pickle in an aluminium utensil after some time utensil metal will get corroded due to reaction and lemon pickle inside will not be fit for human consumption.

2. Explain reaction between sulphur and oxygen. What is the nature of its oxide formed? (3+2)

a. Reaction with oxygen:

Non-metals react with oxygen to form non-metallic oxides. These oxides are acidic oxides because they react with water to form acids.

Eg. Sulphur burns in air to form sulphurdioxide. Sulphurdioxide reacts with water to form sulphurous acid.



b. Reaction with water:

Non-metals do not react with water

c. Reaction with acids:

Most non-metals do not react with acids.

Some non-metals like sulphur react with concentrated nitric acid to form sulphur dioxide, nitrogen dioxide and water.



3. a) A pendulum oscillates 50 times in 6 seconds. Find its time period and frequency.

b) Sound travels through a medium, it cannot travel in vacuum". Justify the statement.

(2+3)

a) Frequency of oscillation is defined as the number of oscillation of a vibrating body per second. it is given by

Frequency = no of oscillation/ time period = $50/6 = 8.33 \text{ Hz}$

Time period = $1/\text{frequency of oscillation} = 1/8.33 = 0.12 \text{ seconds}$.

b) Sound travels through a medium solid, liquid and gas. It cannot travel through vacuum. Fill a bucket with water and shake a bell under the water with one hand make sure that the bell should not touch the body of the bucket. Now place your ear gently on the water surface, you will hear the sound of the ringing bell, thus we can say that sound can travel through water. Take a metal rod and hold its one end to your ear, ask your friend to tap at the other end of metal rod you will hear the sound of tapping, thus this proves that sound can travels through solid.

4. Explain the principle and working and of electroscope.

(5)

Diagram -2

Principle-1

Like charges repel and unlike charges attract

Working-2

1. To know the object carry charge

2. Nature of charge

