

Science Olympiad Level 5

Sections	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	TOTAL
Marks obtained											

General Instructions:

1. Duration of the exam is one hour fifteen minutes.
2. The exam should be answered using pencil on the question paper itself.
3. Please read the questions carefully before answering them.
4. Fill in your details on this page before the exam begins.

Student Details:

Name _____

Std _____

Honour Code:

I pledge that I will not copy or take help from my friends/teachers while answering questions during this exam.

Signature/Name _____

Total Marks: 50

Q1. Cross the odd one out.

(4 mks)

1. Metallic minerals – haematite, bauxite, pyrite, coal, copper
2. Soil conservation – increasing vegetation, deforestation, crop rotation, proper drainage system, development of pastures
3. Organs of breathing – ears, spiracles, gills, nose, moist body surface
4. Vitamin deficiency – night blindness, beriberi, scurvy, goiter, rickets.

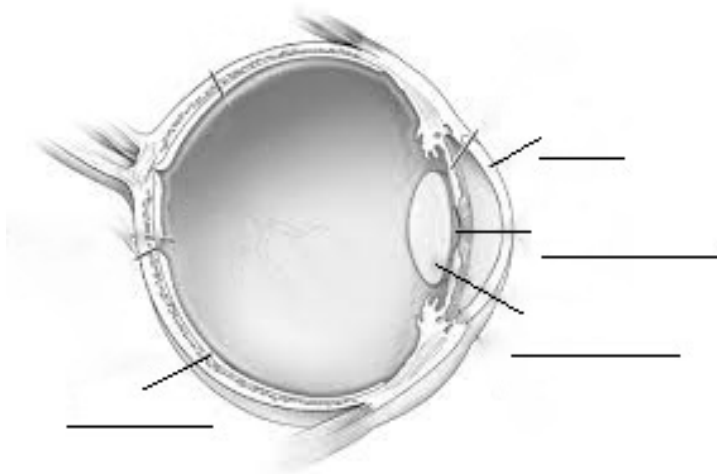
Q2. Match the following.

(4 mks)

Action	Type of force
1. Slipping on a smooth surface	a. Muscular force
2. Mango falling from the tree	b. Elastic force
3. Stretching a rubber band	c. Frictional force
4. Carrying a bucket of water	d. Gravitational force

Q3. Label the parts of a human eye.

(2 mks)



Q4. Answer the questions based on facts you have learnt? (8 mks)

1. Can new plants grow from stem? Give an example.

2. How does milk food group help us?

3. What is a tendon?

4. What is a reflex action?

5. How does light travel?

6. What is the importance of top soil?

7. How does the tongue help you to taste food?

8. What is corrosion? Is it a physical or chemical change?

Q5. Classify.

(4 mks)

1. mushroom, roses, ferns, sugarcane, mosses, hibiscus.

a. New plant from spores –

b. New plant from stems –

2. common cold, cholera, typhoid, measles, jaundice, tuberculosis

a. Airborne diseases –

b. Waterborne diseases –

3. hand muscles, face muscles, stomach muscles, heart muscles, leg muscles, lung muscles

a. Voluntary muscles –

b. Involuntary muscles –

4. sandstone, quartzite, conglomerate, marble, shale, gneiss.

a. Sedimentary rocks –

b. Metamorphic rocks –

Q6. Explain.

(5 mks)

1. Rain water flowing down the hill is muddy.

2. Communicable diseases can be prevented through vaccination.

3. Insects do not have lungs but they still breathe.

4. A tweezer is a third class lever.

5. The brain is an important part of the nervous system.

Q7. Choose the correct option.

(5 mks)

1. Beating of the heart and breathing are involuntary actions. The part of the brain controlling them is -

- a. The Cerebrum
- b. The Cerebellum
- c. The Medulla

2. When a substance burns it forms smoke, gases and ash. This process is called -

- a. Corrosion
- b. Combustion.
- c. Congestion

3. In order to conserve energy we use renewable sources of energy. When energy is derived by burning material derived from living things such as wood, garbage etc it is called -

- a. Biomass energy
- b. Geothermal energy
- c. Solar energy

4. Recently China was hit by an earthquake of magnitude 7.3 on the Richter scale. What instrument was used to record this -

- a. Hypograph
- b. Seismograph
- c. Epigraph

5. Planting of trees on a large scale on an open land is known as -

- a. Deforestation
- b. Afforestation
- c. Development of pastures

Q8. Give Reasons.

(6 mks)

1. All the seeds produced by a plant do not grow into new plants -

2. While playing carom, the striker moves easily when the board is well powdered -

3. Trees should be planted across the direction in which wind blows -

Q9. Say what will happen.

(6 mks)

1. If the moon casts its shadow on part of the earth by blocking the light of the sun.

2. If there is lack of rain in rural agricultural areas.

3. If fruits and vegetables are not washed before eating.

Q10. With the help of activities conducted, pick the correct option. (6 mks)

1. In beaker “A” you place few seeds on some dry cotton wool and in beaker “B” you place few seed completely submerged in water.
You will observe that –
 - a. The seeds in beaker B germinate and grow
 - b. The seeds in beaker A germinate and grow
 - c. The seeds in both beaker A and B germinate and grow
2. A mixture of saw dust and iron nails is on the floor. A magnet can be used to easily separate the two. This is because –
 - a. Saw dust is a magnetic material
 - b. Iron nails are magnetic materials
 - c. Iron nails are not magnetic materials
3. You have received a new fridge. The delivery man is trying to push the fridge to the desired spot. Watching him struggle dad suggests he use his trolley lying in the backyard, now it is very easy to push the fridge. This is because -
 - a. Muscular force suddenly increase because of the trolley
 - b. Electrostatic force is reduced because of the trolley
 - c. Frictional force is reduced because of the trolley
4. Two balloons filled with more or less the same amount of air are tied on either sides of a stick. The stick is held with a string in the centre and is perfectly balanced. You sister comes and pricks the balloons on one side with a pin, the stick immediately tilts towards the side of the blown up balloons. This tells us that –
 - a. Air has weight
 - b. Air occupies space
 - c. Air exerts pressure