



ST.LAWRENCE HIGH SCHOOL
ANNUAL EXAMINATION-2018
CLASS-VI



Beline Jermyp
22/11/18
(BELINE JERMY P)

SUBJECT: GENERALSCIENCE
DURATION: 2HRS 30MINS

F.M.90
DATE: 20.11.2018

Section-A

(25marks)

A. Choose the correct option:

(1x5=5)

- Force applied on an object can change its _____.
(d)all of the above
- If a force of 100N acts perpendicularly on an area of 2m², what is the pressure?
(c)50 Pa
- A jack required to lift a car to change a punctured tyre is an example of a _____.
(b) screw
- Which of the following formulae represents a molecule of ozone?
(b)O₃
- Which of the following constituents of air is used in photosynthesis?
(c)carbon dioxide

B. State whether the following statement is true or false:

(1x5=5)

- A saturated solution can take up any amount of the solute. **False**
- Amoebas are strange organisms that can change its shape. **True**
- Potato is a modified root. **False**
- Conjunctivitis is an eye infection. **True**
- By using lubrication, we can increase the friction between machinery parts. **True**

C. Fill in the blanks:

(1x5=5)

- The perpendicular force acting on the surface is called **thrust**.
- The wheel and **axle** together form a simple machine.
- An **element** is a substance that cannot be split into simpler substances by a chemical means.
- CNG mainly contains **methane**.
- Heating** helps the formation of a solution.

D. Answer in one word:

(1x5=5)

- Name the largest phylum. **Arthropoda**

- Name the point of attachment of the seed to the fruit. **Hilum**
- Insects that carry diseases. **Vectors**
- A force exerted by the muscles of our body. **Muscular force**
- Pressure exerted by a force of 1 newton on an area of 1 square metre. **Pascal**

E. Match the columns:

(1x5=5)

COLUMN A	COLUMN B
1. Wedge	Axe
2. Have cavities in bones	Aves
3. Anther	Filament
4. Calcium	Milk
5. Calcium sulphide	CaS

Section-B

(25 marks)

F. Answer the following questions:

(2x5=10)

- What are exothermic reactions? Give an example.

Ans: Reactions in which heat is released are exothermic reactions. Eg: Burning.

- Which is the most abundant compound on earth? What is its formula?

Ans: Water is the most abundant compound on earth. It's formula is H₂O.

- Name 2 types of contact forces.

Ans: Frictional force and muscular force

- How do the broad feet of camels help them to walk easily on sand?

Ans: Camels have broad feet. This increases the area of contact with the sand. Hence, camels exert pressure on the sand and are able to easily walk in a desert.

- What is a Machine?

Ans: Machines are devices which make our work easier. There are 2 types of machines, they are simple machines and complex machines.

G. Answer the following questions:(attempt any 5 out of 7)

(3x5=15)

- What are the characteristics of non-metals?

Ans:

- They are dull-looking (except graphite and iodine, which are lustrous).
- They are brittle in the solid state, i.e., they break if beaten or bent.
- They do not allow heat or electric current to pass through them (except graphite which allows electric current to pass through it).

- What is the approximate composition of air?

Ans: About 78.1% by volume of air is nitrogen, 21% is oxygen, and the rest (nearly 0.9%)

is carbon dioxide, water vapour and some other gases.

3. Name the steps taken to purify water in a municipal water-treatment plant.

Ans: Sedimentation, Filtration and Chlorination.

4. Define the respiration process in frog.

Ans: Frogs are amphibians, so they can live in water and on land. When they are in water, frogs breathe with the help of their moist skin but when they are on land, they breathe with the help of their lungs.

5. Define venation and its type.(1+2)

Ans: The arrangement of veins on a leaf is called venation. There are 2 types of venation, they are reticulate venation and parallel venation.

6. Give any 3 effects of air pollution on health.(3)

Ans:

- Oxides of sulphur cause respiratory illnesses, such as asthma and bronchitis.
- Oxides of nitrogen cause irritation of the nose and eyes and affect the lungs.
- Particulate matter affects the lungs and other organs of the body.
- Carbon dioxide causes changes in weather patterns thereby affects the health.

7. Write any 3 methods to reduce friction.(3)

Ans: Polishing, Lubrication and using ball bearings and roller bearings.

Section-C

(40 marks)

H. Long answer type questions: (attempt any 8 out of 10)

(5x8=40)

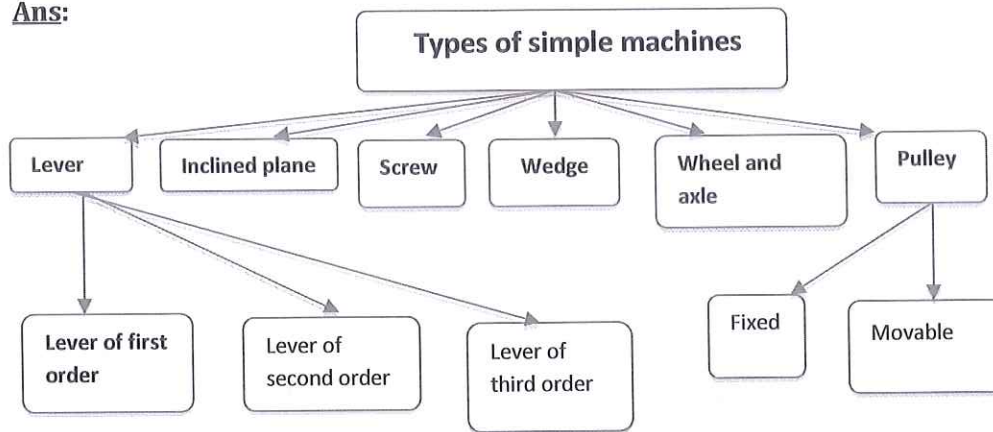
1. Mention any 5 applications of pressure in daily life.(5)

Ans:

- All cuttings and piercing tools such as knives, scissors, needles, saws, pins, axes and blades have sharp edges to reduce the area of contact. Thus, they exert great pressure with comparatively less force.
- School bags and travel bags have broad belts or straps as handles to reduce the pressure on the hand.
- Skiers use flat and long skis to slide on the snow because larger the area of contact, lesser is the pressure on snow.
- Lorries and trucks have broad and double wheels. This increases the area of contact with the ground and hence reduces the pressure exerted on the ground.
- The walls of dams are made wider near their foundations so that they can withstand the pressure of water (because the pressure of water increases with depth).

2. Draw a flowchart on different types of simple machines.(5)

Ans:



3. What are the characteristics of metals? Give one example of a metal.(4+1)

Ans:

- Metals have a lustre, called metallic lustre.
- They are generally hard solids, but can be beaten into sheets and drawn into wires. Mercury is the only metal that is a liquid in normal conditions.
- When struck, they produce a sound, called a metallic sound or metallic clink.
- Heat as well as electric current can pass through metals.
- Magnesium, aluminium, iron, tin, copper, silver and gold are common examples of metals.

4. Explain the process of respiration.(5)

Ans: The food we eat is digested in our body and finally breaks down to glucose. We breathe in air, which contains oxygen. The oxygen of the inhaled air chemically reacts with glucose and converts it into carbon dioxide and water, and releases energy. This process is called respiration. The energy released during respiration is used for life processes. Plants also respire. The starch they make breaks down to glucose. During respiration, glucose is broken down to carbon dioxide, water and energy. The energy released is used for the life processes of the plant.



5. Describe the Water cycle.(5)

Ans: The surface water continuously evaporates into the atmosphere. Also, we use up a lot of water for different purposes. Yet the amount of water on the earth is almost constant. This is because the water is not lost-it only circulates among the various sources. The circulation of water is called water cycle. Water evaporates from the water bodies as well as from plants. These water vapours condense into droplets and dust particles to form clouds. When droplets become large, they fall as rain. In high clouds, it

freezes into crystals of ice. These crystals fall as snowflakes. Sometimes rain freezes into hailstones. Melted snow and rain water merges with the oceans. A part of water seeps into the ground. This is how water circulates and its amount on the earth remains constant.

6. Draw and label any 6 parts of a typical flower.(3+2)

Ans:

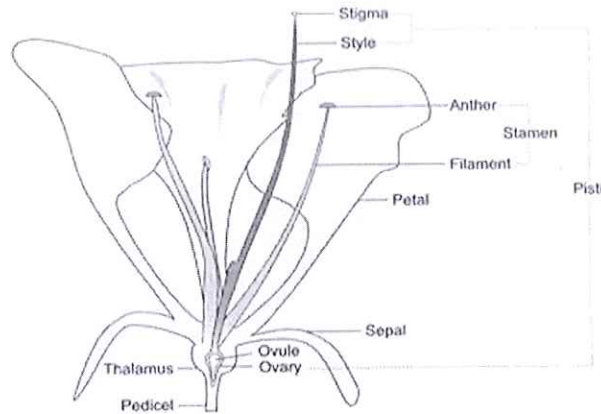


Fig. 6.7 Diagram of the longitudinal section of a flower

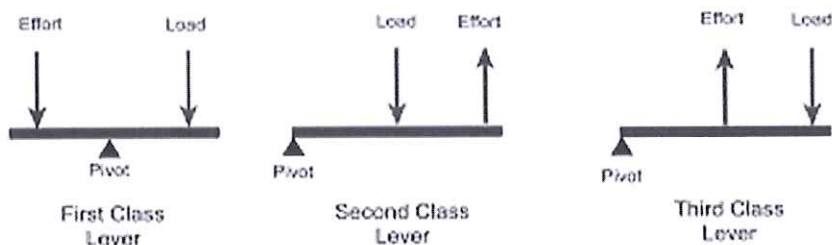
7. How should one look after one's eyes? Any 5 points. (5)

Ans:

- Wash your eyes with clean water. Make sure that your hands are clean before touching your eyes.
- Do not watch television for too long and do not sit too close to it.
- If you have an infection of the eyes, do not touch them. This may spread the infection.
- If you have difficulty reading, tell your parents immediately. You may need glasses to correct your vision.
- Carrots, cabbages, spinach, mangoes and papayas contain vitamin A, which is good for your eyes. Eat plenty of these.

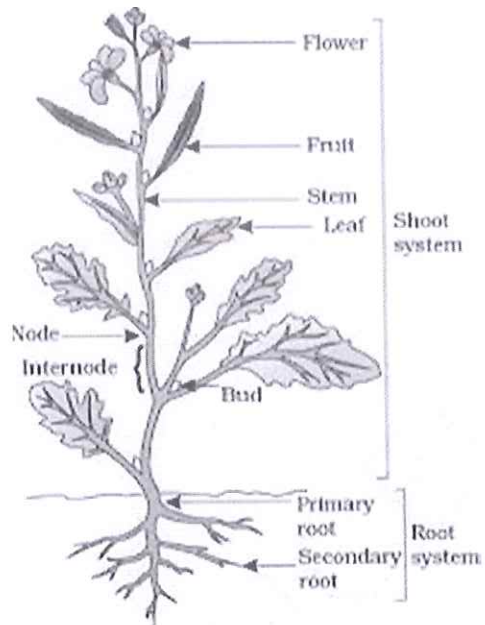
8. Mention and explain the 3 types of levers with diagram.(3^{1/2}+1^{1/2})

Ans: The 3 types of levers are lever of first order, lever of second order and lever of third order.



9. Draw and label any 6 parts of a typical plant.(3+2)

Ans:



10. Explain the structure of a tooth with diagram.(3+2)

Ans:

