



CLASS-VI

SUBJECT: GENERAL SCIENCE DURATION: 2 Hrs 30 Mins

F.M.80 DATE: 7.8.2019

	Se	ection-A	(25marks)
<u>A.</u>	<b>Choose the correct option:</b>		(1x5=5)
1.	Animal cell do not possess		
	(b) plastids		
2.	Mechanical advantage is the ratio of the load	:o the	
	(b) effort		
3.	The molecules of which of the following subst	ances will contain atoms of m	ore than one kind?
	(c) Water		
4.	The edible part of a mango is the		
	(a) mesocarp		
5.	A screw is an example of a /an	_·	
	(c) inclined plane		
<u>B.</u>	State whether the following statement is true	or false:	(1x5=5)
1.	Cells were first observed in a fruit. False		
2.	When a force is applied to pull an object, the o	lirection of motion is always a	away from us. False
3.	Seesaw is the example of third class lever. Fals	e	
4.	The portion of the stem between two nodes is	called internode. <b>True</b>	
5.	The components of a mixture chemically react	with one another. False	
<u>C.</u>	Fill in the blanks:		(1x5=5)
1.	The nucleus contains one or two small spheric	al bodies called <u>nucleoli.</u>	
2.	1 square metre is the area of a square with sign	le 1 metre.	
3.	The liquid obtained from the filtration process	is called <u>filtrate.</u>	
4.	Muscular force is an example of a <b>contact</b> force	e.	

5. Each chromosome carries a large number of **genes**.

### D. Answer in one word:

(1x5=5)

- 1. The degree of hotness or coldness of a body. Temperature
- 2. A tiny sac bounded by a thin skin, or membrane. The cell
- 3. The smallest part of an element or a compound that can exist independently. A molecule
- 4. A liquid commonly used in laboratory thermometers. Mercury
- 5. The life of higher organisms starts from a single cell, which is formed by the fusion of a male cell and a female cell. **Zygote**

## E. Match the columns:

(1x5=5)

COLUMN A		COLUMN B		
1.	Amoeba	f)Food vacoule		
2.	Atoms of different kind	d) compound		
3.	Unit of area	b) a²		
4.	Cellulose	e)Cell wall		
5.	Normal body temperature	a) 37°C		

Section-B

(20 marks)

### F. Answer the following questions:

(2x4=8)

1. Define simple machines.

Ans: Simple machines that are made up of very few parts and which simply change the direction or the magnitude of force or help us to work faster.

2. Define Force and mention the formula of Force.

Ans: Force is a push or a pull that changes or tends to change the state of rest or uniform motion of an object or changes the direction or shape of an object.

Formula of Force= mass x acceleration= ma

3. What are the 2 types of plastids and their pigments. (1 + 1)

Ans: chloroplast- green colour pigment, chromoplast- pigments( red, yellow, orange), leucoplast – colourless

4. Define Pure substance. Give one example. (1+1)

Ans: A pure substance is one that cannot be split into simpler substances by a physical means

such as filtration, sublimation or distillation. Example - Water

G. Answer the following questions:(attempt any 4 out of 6)

(3x4=12)

1. What is pollination? Mention the two types of pollination. (1+2)

Ans: The transfer of pollen grains from the anther to the stigma is called pollination. There are 2 types of pollination, they are Cross-pollination and Self-pollination.

2. Define the 3 kinds of levers. (3)

Ans: Class I Lever, Class II Lever and Class III Lever.

3. Write down the 3 properties of an atom. (3)

Ans:

- The atoms of an element are all alike, i.e., they have the same properties.
- The atoms of an element are different from those of others.
- The atoms of an element show all the properties of the element.
- 4. Leaves are sometimes modified to perform special functions. Why? Give any 3 reasons. (3)

Ans: Leaves are sometimes modified to provide support, for defence, to store food and water, for nutrition and for vegetative propagation.

5. State the Law of Levers. (3)

Ans: Law of levers states that when a lever is balanced,

Load x Load arm = Effort x Effort arm

Or

Load/Effort = Effort arm / Load arm

Thus, mechanical advantage can also be given as

MA = Effort arm/ Load arm

6. Mention the Latin names of Sodium, Iron and copper. (3)

Ans: Sodium - natrium, Iron - ferrum, Copper - cuprum.

Section-C

(35 marks)

H. Long answer type questions: (attempt any 7 out of 9)

(5x7=35)

- 1. List out the steps to be taken for proper care of machines. (5)
  - Machines should be cleaned regularly
  - Moving parts of machines should be lubricated using oil to reduce friction, noise, and wear and tear.
  - The iron parts of the machines should be painted to prevent rusting.
  - It may be necessary to adjust the moving parts from time to time.
  - When a machine is not in use, it should be kept covered to protect it from dust.

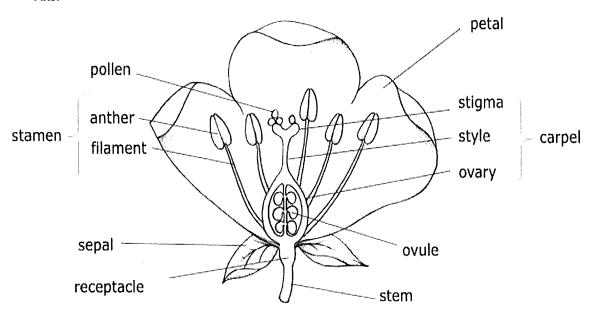
# 2. How a mixture differ from a compound? (5)

# Ans:

s.no	Mixtures	Compounds
1.	It is an impure substance.	It is a pure substance.
2.	It does not have a fixed melting or boiling point.	It has a fixed melting point and a fixed boiling point.
3.	The components can be present in any proportion.	The constituents must be present in a fixed proportion.
4.	The components can be separated by a physical means.	The constituents cannot be separated by a physical means.
5.	The components show their individual properties.	The constituents do not show their individual properties.

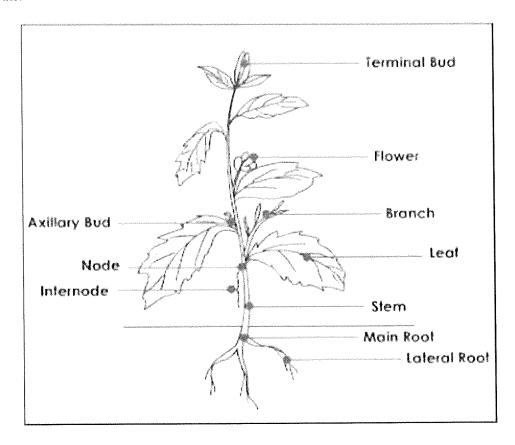
# 3. Draw and label the parts of a typical flower. (5)

# Ans:



Draw and label the parts of a typical plant. (5)

#### Ans:



4. Write any 5 advantages of friction. (5)

## Ans:

- We can write on a paper due to the friction between the paper and the pencil. We cannot write on a smooth paper with pencil because the friction between the smooth paper and the pencil is very less.
- We can light a matchstick because of the friction between the matchstick and the side of the matchbox which has a rough surface.
- Vehicles are able to move on the road because of the friction between the tyres and the road.
- It is because of the friction between the ground and our feet or footwear that we are able to walk by pushing our feet against the ground.
- Parts of machines move on each other because of friction.
- 5. Mention any 5 effects of force. (5)

#### Ans:

- Force cannot change the mass of an object.
- Force can change the speed of the moving object.
- Force can change the state of motion.

- Force can stop a moving object.
- Force can change the direction of a moving object.
- Force can change the shape and size of the object.
- 6. Mention any 5 methods of separating the components from the mixtures and explain each with an example.(5)

#### Ans:

- 1. SIEVING: This can be applied when the particle sizes of the components are different. Particles smaller than the holes in the mesh pass through and the bigger ones remain on the mesh.

  Example: Separating bran from flour.
- 2. MAGNETIC SEPERATION: This can be applied when one of the components is magnetic. When a magnet is moved through a mixture of iron filings and sulphur, the iron particles cling to the magnet. Example: Separating iron from sulphur.
- 3. SUBLIMATION: On being heated, a solid that vaporise without melting. Thus, by sublimation, a substance that sublimes can be seperated from one that does not. Example: Separating Ammonium chloride or camphor from salt or chalk.
- 4. SEDIMENTATION: Allowing a mixture to stand for sometime, the solid which has not dissolved will settle at the bottom and the liquid will remain over it. Example: Separating sand from water.
- 5. DECANTATION: It is a process where liquid can be separated from sediments or another immiscible liquid. Example: Separation of tea from the tea leaves.
- 6. FILTRATION: Filtration is a process used to separate solids from liquids or gases using a filter medium that allows the fluid to pass, but not the solid. Example: Separating chalk from water.
- 7. EVAPORATION: It is the process by which water changes from a liquid to a gas or vapor. Example: Vaporization of sea water in the sun gives crystals of common salt.
- 7. Describe the ways in which communicable diseases are transmitted through food and water. (5)

Ans: WATER- Diseases that spread through contaminated water are called waterborne diseases. Water gets contaminated when sewage gets mixed with it. This may happen when people bathe, wash or defecate in or near the source of water. Water may also get contaminated if it is not stored in clean, covered utensils, or is handled with dirty hands.food prepared or washed with contaminated water may also cause water-borne diseases.

FOOD- Food may also be the source of other kinds of illness. For example, undercooked fish or meat may carry parasitic worms, especially tapeworms. Uncovered food may get contaminated by flies, which sit on garbage and faeces and carry germs on their body. Stale, improperly canned food, untreated/unboiled milk and food handled with dirty hands may cause various tyoes of digestive disorders that re commonly called food poisoning.

8. (a) Write any 3 differences between metals and non-metals. (3)

#### Ans:

METALS	NON-METALS		
1. They are lustrous.	They are dull-looking.		
2. They are generally hard solids, but	They are brittle in the solid state, i.e., they		
can be beaten into sheets.	break if beaten or bent.		
3. Heat as well as electric current	They do not allow heat or electric current to		
can pass through metals.	pass through them.		

(b)	Write the	name of the	elements	using the	symbols giver	below.	(2)	١
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9. Describe the functions of the leaf. (3+2)

#### Ans:

The most important function of a leaf is to manufacture food. The leaf possesses a green
pigment called chlorophyll, which helps it use the energy of sunlight to make food from water
and carbon dioxide. The process by which carbon dioxide and water combine to produce
glucose and oxygen is a chemical reaction called photosynthesis.

Carbon dioxide + Water sunlight Glucose + Oxygen
Chlorophyll (stored) (released)

- 2. Plants take in oxygen for respiration and carbon dioxide for photosynthesis through tiny pores called stomata present on the leaves.
- 3. The stomata also release water vapourinto the air. The process by which plants give out water in the form of vapour is called transpiration.

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