Question Bank 2020-21

Std : V

Term – I

Science

Chapter – 1 (Growing Plants)

I. Name the following

a. The hole which allows water to enter the seed.
b. Seeds which have one cotyledon.
c. Crops grown from November to April.

Answers:

a. Seed hole
b. Monocot seeds
c. Rabi crops

II. Choose the odd one out with reference (reason):

1. radish, carrot, ginger, turnip.
2. mango, pea, poppy, balsam

Answers:

1. Ginger – in all the others the roots can grow into new plants where as in ginger the stem grows into a new plant.
2. Mango – In others, the seeds are dispersed by explosion where as mango seeds are dispersed by animals.

III. State true or false and correct the false statement:

1. Embryo stores food for the baby plant.
2. Hibiscus plant can be grown from stem cutting.
3. Rice and jute grow well in sandy soil.

Answers:

1. False : Cotyledons store food for the baby plant
2. True
3. False : Rice and jute grow well in clayey soil

IV. Give two examples of each:

1. Two states in India where tea is grown.
2. Two Rabi crops.
3. Two plants that grow from spores.

Answer:

1. Assam and Darjeeling.
2. wheat and gram
3. fern and mushroom.

V. Difference between:

1. Dispersal by wind and dispersal by water

2. Monocot seeds and dicot seeds.

Answer:

1. <u>dispersal by wind</u>
a. Seeds are light and have wings or hair like structures on them.
b. These seeds are easily carried away by wind (Ex – cotton, dandelion)

<u>Dispersal by water:</u>

a. Seeds are light and have spongy or fibrous covering around them.
b. These light seeds can float on water (Ex – lotus, coconut)

2. <u>monocot</u>

a. These seeds have one cotyledon. (Ex – maize, wheat)

<u>Dicot:</u>

a. These seeds have two cotyledon (litchi and mango)

VI. Fill in the blanks.

1. _____are sprayed on crops to protect them from insects.
2. _____ help to keep the birds away in farms.
3. Wheat and Jowar grow in _____ soil.
4. A potato has buds on it called _____

Answers:

1. Pesticides
2. Scarecrows
3. sandy
4. eyes

VII. Answer the following questions

1. How do new plants grow from Bryophyllum leaves?
2. Mention three ways of protecting the crops.

Answer:

1. The buds in the notches along the margins of the Bryophyllum leaves develop into new plantlets. When the leaf falls the plantlets get separated and develop into independent plant.
2. Three ways of protecting the crops: - a. Keeping scare crows in the field to keep birds away. B. Spraying pesticides on crops. C. Keeping harvested grains and pulses in air tight container

VIII. Draw a neat labelled diagram showing germination of a seed.

Chapter 2

Food and health

1. Name the following
   a. The disease caused by deficiency of vitamin – A
   b. The nutrients which help in protecting our body against diseases.
   c. The disease caused by the bite of Aedes mosquito.
   d. The disease for which we take BCG vaccine.

Answer:

a. night blindness
b. vitamins and minerals
c. dengue
d. tuberculosis

2. Choose the odd one out with reference
    a. Malaria, anemia, typhoid, measles.
    b. Cholera, jaundice, polio, ringworm.
    c. polio, flu, diphtheria, tetanus
    d. Rickets, Scurvy, AIDS, beriberi

Answers:

a. anemia: Anemia is a deficiency disease where as others are communicable diseases.
b. Ringworm: Ringworm is spread through direct contact whereas others are spread through infected food and water.
c. Flue: Vaccines are available for the other three diseases whereas no vaccine is available for flue.
d. AIDS: AIDS is a communicable disease whereas others are deficiency diseases.

III. State true or false and correct the false statement.

a. Fruits and vegetables are sources of roughage.
b. Children need 3 -4 hours of sleep in a day.
c. Carbohydrates help in the growth of the body.
d. Chicken pox is a caused by fungus.

Answer:

1. True.
2. False. Children need 8 – 10 hours of sleep in a day.
3. False…Proteins help in the growth of the body.
4. False…Chickenpox is caused by virus.

V. Give examples of each:

1. Two sources of vitamin C.
2. Two diseases caused by fungi.
3. Two communicable diseases.
4. Two forms of exercises.
5. Two sources of fats.
6. Two deficiency diseases.
7. Two diseases spread through air.
8. Two sources of iron.

Answers:

1. orange, lemon
2. skin infections, athletes foot
3. malaria, typhoid
4. running, cycling
5. butter, cheese
6. goiter, scurvy
7. common cold, flu
8. Spinach, brinjal.

V. Differentiate between:

1. Carbohydrate & Protein

Carbohydrate:

a. carbohydrate gives energy to our body (Ex – wheat, rice)

Protein:

a. Protein helps in growth of our body. (Ex – pulses, eggs)

3. Communicable disease & non- Communicable disease.

Communicable disease:

a. These diseases can spread from one person to another.
b. These diseases are caused by germs (Ex – typhoid, flu)

Non-communicable disease:

a. These diseases cannot be spread from one person to another.
b. These diseases may be caused due to nutrient deficiency or some other malfunctioning of the body.(Ex – beriberi, rickets)

VI. Fill in the blanks:

a. _____is carried by the bite of fleas carried by rats.
b. Food must be kept _____ to prevent flies sitting on it.
c. _____helps to keep our gums healthy.
d. Excessive intake of fatty food can cause _____

Answers:

a. Plague
b. Covered
c. Vitamin C
d. Obesity

VII. Answer the following questions?

1. Mention three healthy habits.
2. What is posture? How can we maintain proper posture.
3. How are the following nutrients useful to our body?
   a. proteins
   b. fats
   c. vitamin and minerals
   d. water
   e. roughage
4. Give two sources of each of the following?
   a. Vitamin A
   b. Vitamin B1
   c. Vitamin D
   d. Iodine.

Answers:

1. Three healthy habits are
   a. Exercising daily
   b. Taking proper rest and sleep
   c. Having a balance diet.
2. Posture is the position in which we hold our body when we sit, stand, or move. We must keep our back straight while sitting or standing.
3. The various nutrient are useful to us in the following ways
   a. Proteins help in the growth of our body and in repairing damaged tissues and cells in our body.
   b. Fats: they give us energy to do work.
   c. Vitamin and minerals: They help in the normal functioning of our body and also protect our body against diseases.
   d. Water: It helps to get rid of waste from our body in the form of urine.
   e. Roughage: it is the undigested part of plant food which helps in getting rid of wastage from our body.
4. Two sources of various nutrients are as follows:
   a. Vitamin A (Carrot, Papaya)
   b. Vitamin B1 (Cereals, peas)
   c. Vitamin D (Milk, Fish)
   d. Iodine (Iodized salt, sea food)

Chapter – 3

Safety and First Aid

I. Fill in the blanks:
   a. _____is caused when the tissues around a joint get torn.
   b. The emergency number of a fire station is _____
   c. Be _____while handling candles, firecrackers, gas stove etc.
   d. In case of electrical and petrol fire, do not use _____to put it out.

e. Be careful and follow _____on the road to prevent accidents or injuries.

Answer:

a. Sprain.
b. 101
c. careful
d. water
e. traffic signs

II. Choose the odd one out with reference.

a. sling, splint, fracture, tourniquet
b. water, sand, mud, fire extinguisher
c. matchbox, water, candles, fire crackers.

Answer:

a. Fracture….All the others give support to an injured body part whereas fracture is the injury itself.
b. Water….All the others can be used to put out electrical fires but water should not be used.
c. Water….all the others can cause fire accidents whereas water will not cause fire accident.

III. Give two examples of each:

a. Two things that can be used as a splint
b. Two things that can be applied in case of minor burns.

Answer:

a. Magazine, news paper
b. Antiseptic cream, baking soda.

IV. Answer the following questions:

a. How can you give first aid in case of sprain?

b. How can you give first aid in case of nose bleed?
c. Why do we throw mud and sand instead of water to put out petrol fire?
d. What should we do if a person's clothes catch fire?

Answer:

a. In case of sprain, the affected area swells up on which ice must be rubbed till the swelling subsides.
b. In case of nose bleed, the patient should be kept upright with his head held back, cold water should be poured on the patients head. Bleeding side of the nose should be pressed firmly.
c. In case of petrol fire, we should throw mud and sand instead of water because petrol being lighter than water will float up on water and continue burning.
d. If a person's clothes catch fire, the person should be rolled onto the floor until the fire is out. The person can also be covered by a blanket to put out fire.

Chapter – 4

Solids, Liquids and Gases

I. Name the following.
   a. The change in which new substances are formed.
   b. The decrease in size of matter on cooling.
   c. The form of matter in which the molecules can move freely in all directions.
   d. The process by which a gas changes into liquid on cooling.

Answer:

a. chemical change
b. contraction
c. gas
d. condensation

II. Choose the odd one out with reference:

a. nitrogen, oxygen, water, carbon dioxide.
b. milk, lemon juice, cold drink, biscuit.
c. evaporation of water, melting of ice, condensation of steam, burning of coal.

Answer:

a. Water…water is a liquid all the others are gases.
b. Biscuit….Biscuit is a solid, all the others are liquids.
c. Burning of coal….burning of coal is a chemical change; all the others are physical change.

III. State true or false if false correct the statement:
a. Miscible liquids do not dissolve in water.
b. In liquids, the molecules are tightly packed.
c. Changing of a liquid into solid on cooling is called freezing.
d. Aquatic plants take in oxygen dissolved in water.

Answer:

a. False….Immiscible liquids do not dissolve in water.
b. False….In solids, the molecules are tightly packed.
c. True….
d. False….Aquatic plants take in carbon dioxide dissolved in water.

IV. Give two examples of each:
a. Two miscible liquids
b. Two gases
c. Two physical changes
d. Two chemical changes.

Answer:

a. milk, water
b. oxygen, nitrogen
c. melting of ice, melting of wax
d. burning of paper, cooking of food.

V. Differentiate between:

a. solids and liquids
b. expansion and contraction
c. physical change and chemical change
d. evaporation and condensation.

Answer:

a. Solids….Molecules are tightly packed.
Solids have definite shape (Ex – table, chair)

Liquids……Molecules are not tightly packed.

Liquids do not have definite shape (Water, Milk)

b. Expansion….it is the increase in size of matter.
It occurs due to heating.

Contraction…..it is the decrease in size of mater.
It occurs due to cooling.

c. Physical change….it is a temporary change that can be reversed.
No new substance is formed.

Chemical change….it is a permanent change that cannot be reversed.
New substances are formed.

d. Evaporation….in this process, water changes into water vapor.
It occurs due to heating.
Condensation…..in this process water vapor changes into water.
It occurs due to cooling.

VI. Answer the following questions:

1. What happens to the molecules of water on freezing?

2. Why do electric wires between electric poles hang loose in summer?
3. How can a tight metal lid of a jar be opened easily? Give reason for your answer?
4. Why do electric wires between electric poles do not hang loose in winter?
5. Describe evaporation on the basis of movement of molecules?

Answer:

1. On cooling water, the molecules slow down and come very close to each other and they themselves combine into a rigid form to make ice.
2. Electric wires between electric poles hang loose in summer due to expansion.
3. Tight metal lid of a jar can be opened easily by dipping it in hot water because hot water causes the lid to expand a little, thus it opens easily.
4. Electric wires between electric poles do not hang loose in winter due to contraction.
5. During evaporation, the molecules of water start vibrating faster on heating, become free and escape into the air as gas.

VII. Fill in the blanks:

1. Matter is made up of tiny particles called _____
2. Cooking of food is a _____change.
3. Glowing of bulb is a _____change.
4. _____have definite volume but no definite shape.
5. When ice is kept out of a refrigerator, it melts into _____

Answer:

a. molecules
b. chemical
c. physical
d. Liquids
e. Water.

Chapter 5: Soil

Q1.Name the following:

(a)The remains of dead plants and animals found in the soil –humus

(b)The most fertile layer of soil containing humus ----topsoil

(c)The process of wearing off or carrying away of the topsoil by the action of wind or water -----soil erosion

(d)Indiscriminate cutting down of trees ---deforestation

(e)The type of farming in which slopes are cut into steps or terraces especially in hilly regions in order to reduce soil erosion –terrace farming

Q2. Fill in the blanks.

(a)The process of breaking down of rocks by the action of sun, wind and water is called ---------.

Ans: weathering

(b)The uppermost layer of the soil is called ---------

Ans: topsoil

(c)_____provides the essential nutrients to the plants for growth .

Ans: humus

(d)Roots of the trees hold the ____together .

Ans: soil

(e)The protection of soil against soil erosion is called ----------.

Ans : soil conservation

(f)----------is an effective method of reducing soil erosion .

Ans : Afforestation / planting trees

Q3.Differntiate between :

(a)topsoil and subsoil

Ans

(i).

Topsoil	Subsoil
The uppermost layer of soil is called topsoil	(i)The middle layer of soil is called subsoil.
(ii)It contains more humus which provides essential nutrients for plant growth	(ii)It has very little humus

(b)Subsoil and Bedrock Subsoil

Be

SUB SOIL	BEDROCK
(i) It is the middle layer of the soil	(i) It is the bottom layer of soil.
(ii)It contain rock and water	(ii) Not much water is present in this layer

(c) Soil erosion and soil conservation

ANS) SOIL EROSION	SOIL CONSERVATION
(i)The process of carrying away of the top soil of the earth by the action of winds or water is called soil erosion.	(i)The protection of the soil against the soil erosion is called soil conservation
(ii) It decreases the soil fertility	(ii)It increases the fertility of the soil

(d) Deforestation and Afforestation

Ans – Deforestation	Afforestation
(i)Indiscriminate cutting down of trees is called deforestation .	(i)Planting of trees is called afforestation .
(ii)It increases soil erosion .	(ii)It prevents soil erosion.

Chapter 6: Rocks and Minerals

Q1. Name the following.

(a)A very hard rock formed by the slow cooling of magma and is used for making kitchen counters, floors etc –granite

(b)A light coloured igneous rock used by dentists for polishing teeth –pumice

(c)A dense, dark coloured igneous rock used for construction of roads –basalt

(d)A shiny , smooth igneous rock used for making jewelry and cutting tools – obsidian

(e)A soft stone made from particles of sand that get cemented together – sandstone

(f)The most common mineral found in sandstone – quartz

(g)A type of sedimentary rock that has very uneven texture and used in construction – Conglomerate

(h)A type of sedimentary rock used to make bricks and tiles – shale

(i)A type of sedimentary rock containing calcium and shells of sea creatures – limestone

(j)The rocks formed from igneous or sedimentary rocks due to high temperature and pressure –metamorphic rock

(k)A type of metamorphic rock formed from limestone and is used for making statues – marble

(l)A type of metamorphic rock formed from shale , used for making blackboards – slate .

(m)A type of metamorphic rock having light and dark bands –Gneiss

(n)A hard metamorphic rock generally used for making glass and jewellry – quartzite

(o)A mineral that is used to produce nuclear energy –Uranium

(p)A metal used for making electric wires –copper

Q2.Fill in the blanks .

(i)Hot molten rock when present inside the earth is called magma .

(ii)Magma / Lava cools down and hardens to form igneous rocks .

(iii)About 95% of the earth's crust is made up of igneous rocks .

(iv)Sedimentary rocks are formed from the shells of sea creatures .

(v)About 75% of the rocks found on the earth's surface are sedimentary rocks .

(vi)The Red Fort in Delhi is made of red sandstone .

(vii)All rocks are made up of minerals .

(viii)Chalk is a form of limestone .

(ix)Minerals can be metallic or non –metallic .

(x)Coal is used as a fuel in steam engines .

(xi)Petroleum is also called as crude oil or black gold .

(xii)Diamond and Ruby are the minerals used as gemstones .

(xiii)Traces of plants or animals found in sedimentary rocks are called fossils .

Q3.Choose the odd one out with reasons .

(a)granite ,pumice , basalt , limestone .

Ans –limestone ; because limestone is a sedimentary rock while others are igneous rocks .

(b)limestone ,shale , conglomerate , slate .

Ans –slate ; because slate is a metamorphic rock while others are sedimentary rocks .

(c)marble , gneiss , quartzite , pumice .

Ans –pumice ; because pumice is a igneous rock while rest all are metamorphic rocks .

Q4.Give two examples for each of the following .

(a)Igneous rock –granite , basalt .

(b)Sedimentary rock –shale , sandstone

(c)Metamorphic rocks – marble , slate

(d)Metallic minerals –gold , silver

(e)Non –metallic minerals –gypsum ,calcite , mica

(f)Gemstones – diamond ,emerald

Q5.State true or false . Correct the false statements .

(a)Sedimentary rocks contain mica and feldspar .

Ans –false ; Igneous rocks contain mica and feldspar .

(b)Sedimentary rocks are formed due to high temperature and pressure .

Ans –false ; Metamorphic rocks are formed due to high temperature and pressure.

(c)Coal is a kind of sedimentary rock .

Ans – true

(d)Petroleum is used for dry cleaning .

Ans –True

(e)Coal and petroleum reserves are unlimited .

Ans – False ; Coal and Petroleum reserves are limited .

Q6.Answer the following .

(a)Write about the formation of petroleum .

Ans –It is formed from the remains of dead plants and animals which got buried under the sea millions of years ago .

(b)Write two uses of metamorphic rocks .

Ans – The two uses of metamorphic rocks are :

(1)Quartzite –It is used for making glass and jewellery .

(2)Marble –It is used for making statues , floors and slabs .

(c)Write two uses of sedimentary rocks .

Ans –The two uses of sedimentary rocks are –

(1)Shale –It is used to make bricks and tiles .

(2)Limestone –It is used to make cement , lime , glass and bricks .

(d)Write any two uses of igneous rocks .

Ans – The two uses of igneous rocks are –

(1)Granite –It is used for making kitchen counters , floors .

(2)Pumice – I t is used for polishing floors and teeth .

(e)Write the various forms of petroleum .

Ans – The various forms of petroleum are petrol ,diesel ,kerosene and liquefied petroleum gas (LPG).

Chapter 7 : Animal World

Q1.Name the following .

(a)A large area thickly covered with trees and plants – forest

(b)A dry area often covered with sand , with little or no vegetation – desert

(c)A large body of saline water – ocean

(d)A hard outer covering which protects the animals like turtles , snail etc from danger – shell

(e)The property of some animals to merge with their surroundings – camouflage

(f)The shedding of skin periodically by animals like snakes – moulting

(g)The air holes through which the insects breathe – spiracles .

Q2.Fill in the blanks .

(a)Arctic and Antarctica are polar regions .

(b)Lakes and ponds are freshwater habitats .

(c)Bodies of reptiles and fish are covered with scales .

(d)Feathers help the birds to fly .

(e)Animals like chameleons can change their colour to match the surroundings .

(f)Spiracles lead into a network of air tubes called trachea .

(g)Fish breathe through gills .

(h)Gills absorb oxygen from water and give out carbon dioxide from the blood .

(i)Frogs breathe through moist skin in water and lungs on land .

(j)Reptiles ,birds and mammals breathe through lungs .

(k)In mammals , air enters through the nose ,into the lungs where exchange of gases occur .

(l)Bees and butterflies suck nectar of flowers through a long and thin tube called proboscis .

(m)Fish , whales and dolphins have fins for swimming in water .

(n)Snakes move with the help of scales found on their body .

(o)Turtles have paddle like limbs which help them to swim in water .

(p)Ducks have webbed feet to swim in water .

(q)Most mammals have four limbs .

(r)Penguins have flippers to swim in water .

(s)Bats are the only mammals that can fly .

(t)Siberian cranes migrate to India every year in winter .

(u)Arctic tern travels from Arctic to Antarctica twice a year .

(v)Locusts are harmful migratory insects .

Q3.Give two examples of each :

(i)Two animals that breathe through skin –Frog , earth worm

(ii)Two animals that live in polar regions – polar bear , penguin

(iii)Two animals that live in forests – lion , zebra

(iv)Two freshwater habitats – rivers , lakes

(v)Two animals that live in freshwater habitats –duck , swan

(vi)Two animals that live in oceans – whale , dolphins

(vii)Two animals that have scales on their bodies – reptiles , fish

(viii)Two mammals that have fur on their body – sheep , bear

(ix)Two animals showing camouflage –grasshopper , tiger .

(x)Flesh eating birds – vulture , kite .

ANNUAL QUESTION BANK

Std -5

GENERAL SCIENCE

Ch-8

Skeletal System

Q1. Name the following

a. **The longest muscle found in human body _____**
   Ans.-Sartorius
b. **The smallest bone of our body_____**
   Ans-Stirrup
c. **The skull is attached to the backbone called _____**
   Ans-Vertebral Column
d. **The heart and lungs protected by _____**
   Ans-Ribcage
e. **Two pairs of limbs ____ and ____**
   Ans- fore limbs (arms) and hind limbs (legs)

Q2. Differentiate between

a. **voluntary muscles and involuntary muscle**

An

s-

Voluntary muscle	Involuntary muscle
1. These muscles are under our control.	1. These muscles are not under our control
2.These muscles are also called skeletal muscles.	2. These muscles are also called smooth muscles.
3.These muscles are present in arms, legs, hands, feet and neck.	3. These muscles are under the control of brain and spinal cord.

b. ball and socket joint and hinge joint

Ans-

Ball and socket Joint	Hinge joint
1.This type of a joint allows maximum movement.	**2.This type of joint allows movement only in direction – backward and forward.**
2.Ex-The shoulder joint and hip joint.	**2.Ex-The elbows, knees, fingers and toes.**

Q3. Answer the following question

a. Explain how do you keep your bones and muscles healthy.
Ans-
1.To keep our bone strong, we should take foods rich in calcium like banana and milk .
2.Always sit straight and walk erect to keep the back bone healthy.
3. Exercise regularly. Playing outdoor games is also good for bones and muscles.

b. What is bone narrow?

Ans- Some bones are hollow from inside and filled with soft matter called bone marrow.

c. What is ligaments?
Ans- Ligaments are strong, flexible bands of tissues. At joints the bones are held together by ligaments.

Q4.Correct the false statement

a. The skull is made up of 33 bones.
Ans- The skull is made up of 22 bones.

b. Stirrup is the longest bone in the body.
Ans-The thigh bone or femur is the longest bone in the body.

c. The ligament is a place where two bones meet.
Ans-The joint is a place where two bones meet.

Ch-9
The nervous system

Q1 Name the following

a. **The largest part of the human brain _____**
   Ans – Cerebrum
b. **The system controls all other body systems and the sense organs _____**
   Ans – Nervous System
c. **It is called the brain stem _____**
   Ans – Medulla Oblongata
d. **It is the control center of our body. 9It acts like a computer ____**
   Ans – Brain
e. **A nerve connects the eye to the brain _____**
   Ans – Optic Nerve
f. **The largest nerve in the body _____**
   Ans – Sciatic Nerve

Q2.Correct the false statement

a. **An opening of the iris is called retina.**
   Ans – An opening of the iris called pupil.
b. **Spinal cord acts like telephone wires.**
   Ans – Nerves act like telephone wires.
c. **Cerebellum controls involuntary actions.**
   Ans – Medulla Oblongata controls the involuntary actions.

Q3.Answer the following

a. **Write a short note on brain?**
   Ans – The brain is an important organ of our body. It is the control center of our body. It sends and receives messages from different parts of the body through spinal cord and nerves. It is protected by the bony skull.
b. **What are the different parts of the brain? Explain**
   Ans – The brain has three main parts
   1. **Cerebrum-It is the largest part of human brain. It is the centre of intelligence. It controls our sense organs.**

2. **Cerebellum-It lies below the cerebrum. It controls and coordinates the movement of muscles. It helps in maintaining the balance of our body.**
3. **Medulla Oblongata-It is called the brain stem. It lies at the base of the brain. It connects the brain to the spinal cord. It controls involuntary actions.**

c. **What is neurons?**
Ans – Nerves are made up of nerve cells called neurons.

d. **What is the function of ciliary muscle?**
Ans – Ciliary muscles hold and control the shape of the lens.

Ch-10
Force and Machine

Q1. Name the following

a. **A push or pull applied on an object is called _____**
Ans – Force
b. **The fixed point around which the lever moves ___**
Ans – Fulcrum
c. **The object on which work is being done**
Ans – Load
d. **The force applied on the lever**
Ans – Effort
e. **One example of screw**
Ans – Drilling machine

Q2.Answer the following

a. **What is friction?**
Ans – The force that acts between two objects when they are in contact with each other called friction.
b. **What is magnetic force?**

Ans – The force by which a magnet pushes or pulls iron objects or another magnet is called magnetic force.

c. Write any two effects of force?

Ans –1. A force can move a stationary object.

2. A force can change the direction of a moving object.

d. What are the six types of simple machines?

Ans – 1. lever

2. wheel and axle

3. inclined plane

4. Screw

5. Wedge

6. Pulley

e. What is pulley? Names the types of pulley.

Ans – A pulley is a wheel with a grooved rim so that a rope or chain can run around it. A pulley can be of two types

a. Fixed pulley
b. Movable pulley

f. Define axle?

Ans – A wheel attached to a rod called an axle.

Q3.Differentiate between

a. Potential energy and Kinetic energy

Ans -

Potential Energy	Kinetic Energy
1.It is due to the position of an object.	1. It is due to the movement of an object.
2.eg-water stored in a dam has potential energy.	2. eg-Water falling from a height has kinetic energy.

b. Simple machine and complex machine

Ans -

Simple Machine	Complex Machine
1.Simple machines are tools that have very simple structure and that make our work easier and faster.	**1.Complex machines consist of two or more simple machines that work together.**
2. eg-knife and scissors.	**2.eg-washing machines and clock.**

CHAPTER 11

Air and Water

1. **Name the following**
    a. **Purest form of water-** Distilled water
    b. **The fourth layer of atmosphere-** thermosphere
    c. **Substances that makes water dirty and unfit for use-**impurities
2. **Choose the odd one out with reason.**
    a. **Salt, sand, stone, oil**

Ans) Salt is a soluble impurity whereas others are insoluble impurities.

b. Decantation, boiling, chlorination, distillation.

Ans) Using decantation we can remove insoluble impurities whereas others can be used to kill germs and separate insoluble impurities.

3. **True/False**
   a. **Air has no weight-** false
   b. **Exosphere is the 2nd layer of the atmosphere-**False
   c. **The layer in which meteoroids burn out is the Mesosphere-** True
   d. **The layer close to the Earth surface is Troposphere-**True
4. **Give two examples of each**
   a. **Soluble impurities**

      Ans :- Salt, detergent etc

   b. **Insoluble impurities**

      Ans:- sand, soil, stone

   c. **Layers of our atmosphere**

      Ans:- Troposphere, stratosphere, mesosphere etc

5. **Definitions**
   a. **Filtration:- The process by which we can remove all insoluble impurities using a filter paper is called as filtration.**
6. **Differentiate between**
   a. **Nitrogen and oxygen**

Nitrogen	**Oxygen**
i. 78% of air is nitrogen ii. It does not supports burning.	i. 21% of air is oxygen. ii. It helps in burning.

   b. **Filtration and distillation**

Filtration	***Distillation***
i. It removes only insoluble impurities. **ii. Filter paper is used.**	**i. It removes soluble and insoluble impurities.** **ii. Boiling is used to remove impurities.**

7. **Answer the following question.**
    a. **What are the layers of our atmosphere?**
        i. **Layers of our atmosphere are**
            1. **Troposphere**
            2. **Stratosphere**
            3. **Mesosphere**
            4. **Thermosphere**
            5. **Exosphere**
    b. **What is loading?**
        i. **The process of increasing the rate of sedimentation by adding some chemicals like alum is called as Loading.**
    c. **Which is the purest water? Where do we use it?**
        i. **Distilled water is the purest water. We use distilled water in car battery, inverter battery, science laboratory etc.**
    d. **How can we kill the germs present in water?**
        i. **We can kill the germs present in water by**
            1. **Boiling**
            2. **Chlorination**
    e. **How do atmosphere help us?**
        i. **Atmosphere helps us in many ways.**
            1. **It protects us from harmful ultraviolet rays.**
            2. **It protects us from meteoroids.**

8. **Draw and label**
    a. **Sedimentation and decantation**
    b. **Filtration**
    c. **Distillation**

CHAPTER 12

THE EARTH, THE SUN AND THE MOON

1. **Name the following (each carrying 1 mark)**
    a. **The inner most layer of Earth -** Core

b. **The distance between The Earth and The sun -**150 million KM
c. **Temperature on the surface of the sun-**6000 degree celsius
d. **India's first unmanned spacecraft launched successfully from Satish Dhawan Space Centre, Sriharikota-** Chandrayaan- 1

2. **Choose the odd one out with reason (Each carrying 2 marks)**
   a. **Crust, mantle, core, moon**
      Ans:- Moon is a satellite whereas others are layers of earth.
   b. **Sputnik-1, INSAT 2A, CARTOSAT, Rohini**
      Ans:- Sputnik-1 was launched by Soviet Union whereas others was launched by India.
3. **True/False.**
   a. **The diameter of the moon is about 3500 KM. (True)**
   b. **There is no atmosphere on the moon. (True)**
   c. **Inner core of Earth is about 1400 KM thick. (False)**
   d. **ISRO stands for Indian Satellite Research Organization. (False)**
4. **Match the following.**

Column A	Column B
a. First man to go into space	Yuri Gagarin
b. First woman to go into space	Velentina Terashkova
c. First Indian to go into space	Rakesh Sharma
d. First Indian women to go into space	Kalpana Chawla

5. **Give two examples of each**
   a. **Satellites launched by India**
      Ans:- Bhaskara, Rohini
   b. **Astronauts visited moon for the first time**
      Ans:- Neil Armstrong, Edwin Aldrin.
6. **Define the following.**
   a. **corona**
      i. **The sun has a thin layer of air around it called corona.**
   b. **craters**
      i. **Craters are big, round holes that are formed when a pieces of rocks called meteorites crash into the surface.**
7. **Differentiate between**
   a. **Total solar eclipse and partial solar eclipse**

Total solar eclipse	Partial solar eclipse
Total solar eclipse occurs when New moon comes between the sun And the Earth and cast the darkest Part of its shadow, the umbra, on Earth.	A partial solar eclipse happens when the Moon comes between the Sun and Earth but the Moon only partially covers the Sun's disk.

b. Artificial satellites and natural satellites.

b. Artificial satellites	**Natural satellites**
Objects made by human which rotates around Earth are called artificial satellites	**Natural objects which rotates around the Earth are called Natural satellites**
Ex: Rohini, Bhaskara	**Ex:- moon**

8. **Answer the following questions.**
    a. **What is a artificial satellite?**
        i. **Artificial satellites are the man-made objects that revolves around the Earth. They are sent into the space to gather information.**
        ii. **The first satellite launched into space was Sputnik-1.**
    b. **What are the uses of Artificial satellites?**
        i. **Artificial satellites are used for forecasting weather, transmitting signals of mobiles or television programs, etc.**
    c. **What is Umbra?**
        i. **The part of the shadow that totally blocks the light is called umbra.**
    d. **What is Penumbra?**
        i. **The part of the shadow that partially blocks the light is called umbra.**
9. **Draw and label**

a. **Lunar Eclipse**
b. **Solar Eclipse**

CHAPTER 13

NATURAL CALAMITIES

1. **Name the following**
    a. **The device used to measure the shock waves produced in an earthquake**
       Ans- seismograph
    b. **Other name of tidal waves- Tsunami**
    c. **The country where earthquake occurs frequently Japan**
2. **True/False**
    a. **Earthquake of 1 or 2 magnitude causes massive damage.**
       (False)
    b. **In tsunami, the sea water moves as fast as 200 km/hr.**
       (False)
    c. **The centre of earthquake on earth surface is known as focus.**
       (False)
3. **Give two examples of each**
    a. **Extinct volcanoes**
        i. **Zuidwal volcano**
        ii. **The Emperor seamount chain**
    b. **Dormant volcanoes**
        i. **Mount Kilimanjaro**
        ii. **Narcondam**
    c. **Active volcanoes**
        i. **Mount Erebus**
        ii. **Mount Fuji**
4. **Definitions**
    a. **Plates**
        i. **Upper layer of the Earth called crust is made of big rocks masses called plates.**
    b. **Vent**
        i. **The magma rushes upwards through a vertical tunnel called vent.**
    c. **Richter scale.**
        i. **Richter scale is used for determining intensity of an earthquake from the recording made by a seismograph.**
5. **Differentiate between**

a. **Active volcano and Dormant volcano**

Active volcano	Dormant volcano
i. The volcanoes that have erupted in recent years or may erupt at any time. ii. Ex:- Mount Fiji, Mount Vesuvius	i. The volcanoes that have not erupted in recent years but may erupt in future. ii. Ex:- Mount Kilimanjaro, Narcodam

6. **Answer the following question.**
   a. **Explain the Richter scale measurement.**
      i. **Richter scale starts from 1 and upward.**
      ii. **Earthquakes of 1 magnitude are almost not felt but those of 3 or 4 can be felt.**
      iii. **Earthquake of 8 or higher magnitude cause massive damage.**
   b. **What are the different types of volcanoes?**
      i. **Different types of volcanoes are**
         1. **Active volcano**
         2. **Dormant volcano**
         3. **Extinct volcano**
   c. **Which one is the only active volcano present in India?**
      i. **Barren island is the only active volcano in Indian. It is located in Andaman Island.**

CHAPTER 14

OUR ENVIRONMENT

1. **Name the following**
    a. **Gas used in AC and refrigerator which increases the concentration of greenhouse gases**
       Ans:- chlorofluorocarbon
    b. **Harmful changes brought in the environment by human activities**
       Ans Pollution
2. **Choose the odd one out with reason**
    a. **Carbon dioxide, water vapor, methane, nitrogen**
       Ans:- Except nitrogen, all other are green house gases.
3. **True/False**
    a. **Oxygen is a greenhouse gas. (False)**
    b. **By using public transport, we can reduce pollution. (True)**
    c. **Greenhouse effect reduces our environment temperature. (False)**
4. **Give two examples of each**
    a. **Gases which traps heat energy**
       Ans:- Carbon dioxide, methane
    b. **Noise pollution**
        i. **Factories, aeroplane engines.**
5. **Definitions**
    a. **Greenhouse gases**
       The gases which traps heat energy and does not allow heat to escape into space are called Greenhouse gases. Ex:- carbon dioxide
    b. **Fossil fuels**
       Fuels like coal and petroleum that are formed from the remains of living organisms are called fossil fuels.
6. **Answer the following question.**
    a. **Explain how greenhouse effect is used in agriculture?**
       Greenhouse effect is used in cold areas or in winter seasons to keep the environment warm for agriculture process.
    b. **How can we reduce water pollution?**
       The ways to reduce water pollution are

i. **Don’t release house hold and factory wastes into water bodies.**
ii. **Reduce wastage of water.**
iii. **Use Environmentally Friendly Detergents**

c. **How human activities increases the concentration of greenhouse gases?**

Ans Human activities like burning of fossil fuels, deforestation and use of chlorofluorocarbons in air conditioners and refrigerators are increasing the concentration of greenhouse gases in the atmosphere leading to global warming.