

Chapter 1 Matter in our surroundings

1 Marks Questions

2021

1.Convert 300K into Celsius scale.

2022

1.Covert 573K into Celsius scale.

2025

1.Dry ice is: (a) Water in solid state (B) Water in gaseous state (c) Co₂ in liquid (d) CO₂ in soild state

2 Marks Questions

2021

1.How does the water kept in an earthen pot become coolduring summer?

2. What are the characteristics of the particles ofmatter?

2022

1.What are the characteristics of the particles of matter?

2.How does the water kept in an earthen pot become cool during summer?

2023

1.Convert the following temperatures into the Kelvin Scale: (a) 25°C b) 373°C

2.What type of clothes should we wear in summer?

3.A gas fills completely the vessel in which it is kept. Give reason.

2024

1.What types of clothes should we wear in summer and why?

2025

1.Why does a desert cooler cool better on a hot dry day.

3 Marks Question

2025

1.Naphthalene balls disappear with time without leaving any solid.

2.We can get the smell of perfume sitting several meters away.

5 Marks Question

2023

1.What are the characteristics of the particles of matter? Explain in detail.

Chapter 2 Is matter around us Pure

1 Marks Questions

2021

1.Which separation technique is used to separate butter from curd?

2022

1.Give separate technique for Butter from curd.

2023

1.Which of the following will show 'Tyndall Effect'? (a)Salt Solution b) Milk c) Copper Sulphate Solution d)Starch solution

2.Air is (a)Mixture b)Solid c)Element d)Compound

2024

1.Which of the following will show "Tyndall effect": (a) salt sol (b) water (c) copper sulphate sol (d) milk

2025

1.Which of the following is pure substance? (A) air (B) sugar sol (c) Salt sol (d) Gold

2. **Assertion(A):** Alloys are homogeneous mixture of metals.**Reason(R):** Alloys cannot be separated into their components by physical methods.

(a) Both Assertion (A) and Reason (R) are true and reason is the correct explanation of Assertion(A).

(b) Both Assertion (A) and Reason (R) are true and reason is not the correct explanation of Assertion(A).

(c) Assertion is true, but Reason is false.

(d) Assertion is false but Reason is true.

2 Marks Questions

2021

1. How are solutions, suspension and colloids different from each other?

2022

1. What is meant by Pure substance.

2. How would you confirm that colourless liquid give you pure water.

2023

1. List the differences between Homogeneous and Heterogeneous mixtures?

2024

1. Differentiate between homogeneous and heterogeneous mixtures with examples.

2. Explain: (a) Law of conservation of mass (b) Law of constant proportions.

2025

1. Explain saturated solution by giving an example.

5 Marks Questions

2023

1. How are Sol, solution and suspension different from each other?

2024

1. Differentiate between compound and mixtures

Chapter 3 Atoms and Molecules

1 Marks Questions

2021

1. Write the Chemical formula of Aluminium Chloride.

2024

1. Electronic configuration of sodium is: (a) 1,2,8 (B) 2,1,8 (c) 2,8 (d) 8,2,1

2025

1. The chemical symbol of sodium is : (a) So (b) Sd (c) NA (d) Na

2 Marks Questions

2021

1. What is meant by term chemical formula?

2. Calculate the molecular mass of following: CO_2 , CH_4 , C_2H_4 , CH_3OH given atomic mass of C=12u, O=16u, H=1u

2022

1. What is meant by term chemical formula?

2. Write the Chemical formula of Aluminium Chloride and Sodium chloride

2023

1. How many atoms are present in : (a) H_2S molecule (b) PO_4^{3-} ion

2024

1. If one mole of carbon atoms weighs 12 grams, what is the mass of 1 atom of carbon?

2025

1. If atomic number (Z)=3, What would be the valency of the element? Also name the element.

5 Marks Questions

2025

1. Write the chemical formulae of the following: (a) Magnesium chloride (b) Calcium chloride (c) Copper nitrate (d) Aluminium chloride (e) Calcium carbonate

Chapter 4 Structure of Atom

1 Marks Questions

2021

1. Number of valence electron in Cl^- ion are: (a) 17 (b) 18 (c) 7 (d) 8

2023

1. Number of valence electrons in Cl^- ion are: (a) 16 (b) 8 (c) 17 (d) 18

2024

1. Rutherford's alpha-particle scattering experiment was responsible for the discovery of: (a) Proton (b) Electron (c) Atomic nucleus (d) Neutron

2025

1.Number of valence electron in Cl⁻ion are: (a) 17 (b) 18 (c) 7 (d) 8

2 Marks Questions

2021

1.What are the limitations of Rutherford's model of atom?

2. Describe Bohr's model of an atom.Draw a sketch of bohr's model of an atom with three shells.

2022

1.How will you find the valency of chlorine by its atomic number.

2.Describe Bohr's model of an atom

3 Marks Questions

2023

1.What is the mass of : (a) 0.2 mole of oxygen atom (b)0.5 mole of water molecules

2024

1.Compare the properties of electrons, protons and neutrons.

Chapter 5 Fundamental Unit of Life

1 Marks Questions

2021

1.Which organelle is known as the 'Power house of the cell'?

2022

1.Expand the term DNA.

2023

1.Chromosomes are made up of: (a)DNA (b)Protein (c)DNA and Protein (d)None of these

2.Which out of the following is not a function of vacuole? (A) Storage (b) Providing Turgidity and rigidity to the cell (c) Waste excretion (d)Locomotion

2024

1.Which organelle is known as the 'Power house of the cell'?

2025

1.Which organelle is known as the 'Power house of the cell'?

2 Marks Questions

2021

1.If the organization of cell is destroyed due to some physical or chemical influence the what will happen?

2023

1.What are the functions of Stomata?

2024

1.Why Lysosomes are called suicidal bags of the cell?

2025

1.Can you name the two organelles that contain their own genetic material?

3 Marks Questions

2022

1.What is the difference between prokaryotic and eukaryotic cell

2023

1.Draw a well labelled diagram of Animal Cell.

2024

1.How do gymnosperms and angiosperms differ from each other?

2.What are the advantages of classifying organism?

4 Marks Questions

2021

1. Differentiate between plant cell and animal cell with help of well labelled diagram

5 Marks Questions

2025

1.Compare plant and animal cell with the help of diagrams.

Chapter 6 Tissue

1 Marks Questions

2021

1.Name the tissue present in the brain?

2022

1. Blood is the example of which tissue?

2023

1. Name the tissue responsible for the movement in our body.

2024

1. Xylem contains: (a) Xylem tracheids (b) Xylem parenchyma (c) Vessels (d) all of these

2025

1. Blood is the type of: (a) Connective tissue (b) Muscular tissue (c) Nervous tissue (d) Epithelial tissue

2. **Assertion(A):** Permanent tissue is composed of mature cells.

Reason(R): Meristematic tissue is a group of actively dividing cells..

(a) Both Assertion (A) and Reason (R) are true and reason is the correct explanation of Assertion(A).

(b) Both Assertion (A) and Reason (R) are true and reason is not the correct explanation of Assertion(A).

(c) Assertion is true, but Reason is false.

(d) Assertion is false but Reason is true.

2 Marks Questions

2021

1. Draw a labelled diagram of Neuron.

2022

1. What is the specific function of Cardiac muscles.

2. Draw a labelled diagram of Neuron.

2025

1. Give three features of cardiac muscles.

4 Marks Questions

2021

1. Name types of simple tissues. How are simple tissues different from complex tissues in plants?

2022

1. Differentiate between striated, unstriated and cardiac muscles on the basis of their structure and location in the body

2023

1. Give three features of Cardiac Muscles

5 Marks Questions

2023

1. Diagrammatically show the difference between the three types of muscles fibres ?

2024

1. Differentiate between striated, unstriated and cardiac muscles on the basis of their structure and location in the body

2025

1. How are simple tissue different from complex tissues in plants?

Chapter 7 Motion

1 Marks Questions

2021

1. Name the quantity measured by the area occupied below the velocity time graph.

2022

1. What is circular motion?

2. How will you say a body is in uniform acceleration.

3. Odometer measures.....

2023

1. An odometer of vehicle measures- (a) Speed (b) Acceleration (c) Distance (d) Velocity

2024

1. S.I unit of acceleration is: (a) ms^{-1} (b) ms (c) ms^{-2} (d) none of these

2025

1. The tendency of objects to resist a change in their state of rest or of uniform motion is called: (a) Momentum (b) Inertia (c) Acceleration (d) Friction

2 Marks Questions

2021

1. The speed of a bus decreases from 80Km/h to 60Km/h in 5seconds. Find the acceleration of the bus.

2023

1. Distinguish between Speed and Velocity.

2024

1. What is the nature of the distance time graph for uniform and non uniform motion of an object?

Chapter-8 Force and Laws of Motion

1 Marks Questions

2021

1. What is the momentum of object of mass 'm' moving with velocity 'v': (a) mv (B) mv^2 (c) $1/2mv^2$ (d) mv^2

2022

1. Unit of force.....

2.

2023

1. What is the momentum of an object of mass m , moving with a velocity v : (a) $(mv)^2$ (b) mv^2 (c) $1/2mv^2$ (d) mv

2. Unit of force is: Joule (a) Meter/sec (b) Meter/sec (c) Newton (d) Kilogram

2 Marks Questions

2021

1. Define momentum and force. Give their units.

2. Explain, why is it difficult for a fireman to hold a hose which ejects large amount of water at a high velocity?

2022

1. How would you fall forward direction when a moving bus breaks suddenly to stop.

2023

1. Explain why some of the leaves may get detached from a tree if we vigorously shake its branch?

2025

1. Explain why some of the leaves may get detached from a tree if we vigorously shake its branch?

5 Marks Questions

2025

1. A trolley while going on an inclined plane, has an acceleration of 2ms^{-2} . What will be its velocity 3s after the start?

(b) Why is it difficult to hold a school bag having a strap made of a thin and strong string?

(c) What is the S.I unit of 'G'?

Chapter 9 Gravitation

1 Marks Questions

2021

1. How does the force of gravitation between two objects change. When the distance between them is reduced to half?

2022

1. What is the acceleration of free fall?

2. What is the unit of Density.

3. The reason for the movement of moon around the earth is due to which force.....

2024

1. SI unit of 'G' is.....

2025

1. **Assertion(A):** Any two objects in the universe attract each other by a force called gravitation.

Reason(R): The force of gravitation exerted by the earth is called gravity.

(a) Both Assertion (A) and Reason (R) are true and reason is the correct explanation of Assertion(A).

(b) Both Assertion (A) and Reason (R) are true and reason is not the correct explanation of Assertion(A).

(c) Assertion is true, but Reason is false.

(d) Assertion is false but Reason is true.

2 Marks Questions

2021

1.What are differences between mass of an object and its weights.

2022

1.Define Universal Law of Gravitation.

2. What is the difference between g and G .

3 Marks Questions

2024

1.Define the following: (a) Universal law of gravitation (b) Law of inertia

2.What are differences between mass of an object and its weights

Chapter-10 Work and Energy

1 Marks Questions

2021

1.Write expression for kinetic energy.

2022

1.What is Kinetic energy of the object.

2.Define watt of power.

2024

1.Write the expression for Power.

2025

1.The S.I unit of pressure is: (a) Pascal (b) Newton (c) Joule (d) Watt

2 Marks Questions

2021

1.Define Power and Average power.

2. A lamp consumes 1000 of electrical energy in 10 sec .What is its power?

2024

1.What is Power?Define 1 watt of power.

2025

1.What is the kinetic energy of an object? Write an expression for the kinetic energy of an object.

3 Marks Questions

2023

1.What do you mean by buoyancy?

2025

1.Find the energy possessed by an object of mass 10 kg when it is at a height of 6 m above the ground.Given, $g = 9.8 \text{ m/s}^2$.

2.An object of mass 15kg is moving with a uniform velocity of 4ms^{-1} . What will be the Kinetic Energy of the object?

Chapter 11 Sound

1 Marks Questions

2021

1.What is the range of frequency associated with ultra sound?

2022

1.What is the audible range of human ear.

2.In which of the three media air,water and iron does the sound travel fastest.

2025

1.Sound travels fastest in: (a) air (b) water (c) steel (d) vacuum

2 Marks Questions

2021

1.How is ultra sound is used for cleaning?

2025

1.What is Reverberation? How can it be reduced?

4 Marks Questions

2021

1.What is sound? Explain the working and applications of a SONAR.

2023

1.Explain how sound is produced by your School bell?

5 Marks Questions

2022

1.What are wavelength, Frequency , time period and amplitude of a sound wave?

2023

1.a) Explain how bats uses ultrasound to catch a prey.

2024

1.What are wavelength, Frequency , time period and amplitude of a sound wave?

2025

1.Explain how defects in a metal block can be detected using ultrasound.

Chapter 12 Improvement in Food Resources

1 Marks Questions

2021

1.Fertilizers contain large quantity of.....matter.

2. The main component of manure is: (a) inorganic (b) organic (c) water (d) air

2023

1.Which animal among the following is a mammal? (a)Snake (b) Frog (c) Whale (d) Pigeon

2.Which one is not a source of carbohydrate? Rice (b) Millets (c) Sorghum (d) Gram

3.Which one of the following nutrients is not available in NPK fertilisers? Nitrogen (b) Phosphorus (c) Iron (d) Potassium

4.Which one is not a source of carbohydrate? (a)Rice (b) Millets (c) Sorghum (d) Gram

2024

1.Rabi crops are grown in which season?

2.Red sindhi and Sahiwal are local breeds of.....

2 Marks Questions

2021

1.What are the advantages of intercropping and crop rotation?

2023

1.What are the difference between animals belonging to the aves group and those in the Mammalia group?

1.What is immunisation?

2024

1.What are benefits of Cattle farming?

2025

1.How are Fish Obtained.

2. What factors may be responsible for losses of grains during storage?

3 Marks Questions

2022

1.Explain any one method for the Crop production which ensures high yields.

2023

1.How are fish obtained

2024

1.How do biotic and abiotic factors affect crop production?

5Marks Questions

2022

1.What is the genetic manipulation?How is it useful for agriculture practices.

2023

1.What are the different means by which infectious diseases are spread?

