CLASS 6 WINTER BREAK HOMEWORK 2025-26

INSTRUCTION : TAKE PRINT OUT OF IT AND PASTE IN SCIENCE NOTEBOOK AND WRITE ANSWERS IN NOTEBOOK . THIS CONTENT IS RELATED TO YOUR UPCOMING PT2 SYLLABUS

- **Measurement of Length and Motion**

Motion is the change in the position of an object concerning time. Distance is the total length of path traveled by an object. Units of distance include meters, kilometers, and miles. There are different types of motion, including translational, rotational, and oscillatory. Translational motion involves movement from one point to another. Rotational motion involves movement around a fixed axis. Oscillatory motion involves repetitive back-and-forth movement. Circular motion involves movement in a circular path. Units of speed include meters per second, kilometres per hour, and miles per hour. Understanding motion and distance is crucial in physics and engineering to describe and analyze the world around us.

Distance measurement tools

Question 1.
Define SI unit.

_____
_____

Question 2.
Name the unit for measuring the distance between Delhi and Vrindavan.

_____

Question 3.
Why are handspan and arm length not used as standard units of length?

_____
_____

Question 4.
Give the unit for measuring the thickness of a coin.

_____

Question 5.
Name the SI unit of time.

_____

Question 1.
What type of motion is associated with
(a) Motion of a wheel _____
(b) Motion of a boy on the swing _____
(c) The swing of a pendulum clock _____
(d) Planets orbiting the sun in our solar system _____
(e) Skating in a straight line _____

Question 2.
What is the SI unit of length?

_____

Question 3.
What is the name of the global standard system of units, used in most countries and scientific applications, which provides a consistent and coherent way of measuring physical quantities?

_____
_____

Question 4.
What is the type of motion shown by a block sliding across a frictionless surface moving in a straight line?

_____

Question 5.
Arrange the following lengths in their increasing magnitude:
1 meter, 1 centimeter, 1 kilometer, 1 millimeter.

_____

Question 6.
The distance between Radha's home and her school is 3250 m. Express this distance into km.

_____
_____

Question 7.
While measuring the length of a knitting needle, the reading on the scale at one end is 3.0 cm, and at the other end is 33.1 cm. What is the length of the needle?

_____

Question 8.
What is the motion of an object or a part of it around a fixed point called?

_____

Question 9.
What is the motion of an object called if it repeats its motion after a certain interval of time?

_____

Question 10.
Name the SI unit of time and weight.

_____

Question 11.
Define a reference point.

_____

Question 12.
What is the type of motion shown by a satellite orbiting the Earth?

_____

Question 13.
What does your physical education teacher use to measure the length of the playground?
_____

_____

- **Materials Around Us.**

QUES 1. What is an Si unit? Give SI units of important measurements. Write the advantages of SI units over traditional units of measurement.

QUES 2. Define motion. What are different types of motion? EXAMPLES ALSO
QUES 3. Give two examples of rotational motion.
QUES 4. Explain the concept of a reference point in measuring distance
QUES 5. What type of motion is exhibited by a swing?

- **Temperature and its Measurement**

Question 1.
The lowest standard and highest standard temperature are
(a) 100°C and 0°C
(b) 0°C and 100°C
(c) 0°C and 0°C
(d) 100°C and 100°C
Question 2.
The temperature at which water boils on a Fahrenheit scale is
(a) 100°F
(b) 32°F
(c) 0°F
(d) 212°F
Question 3.
The normal temperature of the human adult body is
(a) 37 K
(b) 37°C
(c) 37°F
(d) 37.5°F

Question 4.
The scale most commonly and widely used to measure temperature in India is
(a) Fahrenheit scale
(b) Celsius scale
(c) Either Fahrenheit or Celsius scale
(d) Kelvin scale
Question 5.
A student wants to read a doctor's thermometer. Which is the correct option to measure the proper method of reading temperature?
(a) The thermometer should be above his/her eyes.

(b) The thermometer should be below his/her eyes.
(c) The thermometer should be before his/her eyes.
(d) Hold the thermometer bulb anywhere near his

Question 2 What is the normal temperature of a healthy human adult in °F?

_____

Question 3.
What is the function of a kink present near the bulb of a clinical thermometer?

_____

Question 4.
Define temperature.

_____

Question 5.
What is a thermometer?

_____

Question 6.
What are the two different types of thermometers?

_____

Question 7.
What is the advantage of a digital-based thermometer over a mercury-based thermometer?

_____

_____

Question 8.
Name the thermometer that measures temperature without touching a person's body.

_____

_____

Question 9.
Where is it recommended to place a digital thermometer, when measuring the body temperature of small children or elderly individuals?

_____

Question 10.
Write one advantage of infrared thermometers over digital thermometers.

_____

_____

Question 11.
Name the disease caused by severe mercury poisoning.

_____

Question 12.
Name two liquids that can be used in a laboratory thermometer.

_____

Question 13.
Which is the scale that is not used in most of the scientific studies?

_____

Question 14.
Convert degree Celsius to Kelvin.
(a) 37°C
(b) 100°C
Question 15.
The temperature during a hot day in Madhya Pradesh was 45°C. Express this temperature in °F.
_____
_____
_____
Question 16.
Convert 77 degrees Fahrenheit to degree Celsius.
_____
_____

- **A Journey through States of Water**

Multiple Choice Questions

Question 1.
The conversion of water into its vapors is
(a) evaporation
(b) condensation
(c) sublimation
(d) transpiration

Question 2.
Reason for the formation of the droplets of water on the outer surface of the ice-cold water glass is
(a) water seeped out from the glass
(b) evaporation of atmospheric water vapour
(c) condensation of atmospheric water vapour
(d) evaporation of water from the glass

Question 3.
Ayushi accidently dissolves a little amount of sugar in a tumbler half filled with water. Which method would you use to get the sugar back from the solution?
(a) Decantation

(b) Evaporation
(c) Sedimentation
(d) Condensation

Question 4.
In water cycle, the process by which water vapour in the air cools and changes into liquid droplets?
(a) Evaporation
(b) Condensation

(c) Transpiration
(d) Infiltration

Question 5.
One of the best examples of condensation in everyday life is:
(a) sweating
(b) breathing onto a cold window
(c) taking a hot shower
(d) boiling water

Question 1
Name two factors on which the rate of evaporation depends.
_____

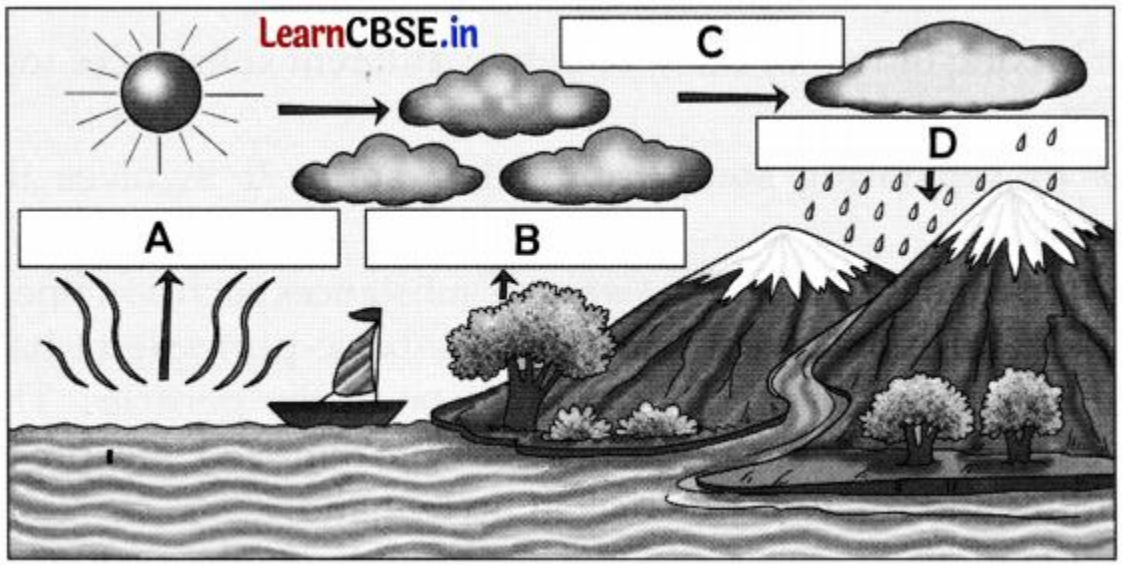
Question 2
How is the humidity and evaporation rate related to each other?
_____

Question 3
What is the scientific principle behind the use of earthen pots made of sand and clay during the summers?
_____
_____

Question 4
Name the phenomena responsible for the disappearance of hand sanitizer as we mb it on our hands.
_____
_____

Water, nature's precious treasure, is a vital component of our ecosystem. As the global population grows, the demand for potable water increases, putting pressure on this finite resource. In India, the water cycle plays a crucial role in replenishing water sources, with the rainy season bringing much-needed relief ' to the country's agricultural lands and inhabitants. The monsoon season, which typically lasts from June to September, is a display of the water cycle's power, as it brings life-giving water to the region, rejuvenating the environment and supporting the country's rich biodiversity. But, with increasing urbanization and industrialization, the demand for portable water is skyrocketing, highlighting the need for sustainable management and conservation of this precious resource to ensure its availability for future generations.

Question 1.
Predict the phenomena that are shown in the figure.



_____

Question 2.
How do the above phenomena help to maintain most of the life and ecosystems on the planet?

_____
_____
_____

Question 3.
Write all the terms related to 'A', 'B', 'C', and 'D' marked in the figure.
A = _____
B = _____
C = _____
D = _____

Question 4.
How is condensation significant in the process of bringing evaporated water back to the Earth's surface?

_____
_____

_____

Question 5 Describe the process of condensation with an example.

_____
_____

- **Methods of Separation in Everyday Life**

Question 1.
A bag is full of fruits and vegetables like tomatoes, capsicum, green chilies, apples, potatoes, brinjals, and oranges. Which is the perfect method of separating these?
(a) Winnowing
(b) Threshing

(c) Sieving
(d) Handpicking

Question 2.
Which method would you use to separate the tea liquid from the tea leaves?
(a) Winnowing
(b) Threshing
(c) Sieving
(d) Handpicking

Question 3.
Which method will you use to separate peanuts from pulses?
(a) Winnowing
(b) Threshing
(c) Sieving
(d) Handpicking

Question 4.
The appropriate method used to separate grains from stalk is
(a) winnowing
(b) threshing
(c) sieving
(d) handpicking

Question 5.
The method used to get salt from the seawater is
(a) winnowing
(b) evaporation
(c) sieving
(d) handpicking

Ques 6 Name the method that is used for the separation of:
(a) small stones from pulses _____
(b) seeds from watermelon _____
(c) sawdust from iron nails _____
(d) coconut pieces from wheat flour _____
(e) mustard oil from water _____

Ques 7 Name the method used to separate:
(a) Paneer from the mixture of milk and water_____

(b) Iron safety pins lying with plastic buttons_____

Ques 8 What is the reason behind the improvement in visibility and increase in air quality index (AQI) in Delhi during winter smog when it rains?

_____

_____
_____

Competency/Case-Based Questions (CBQs)

The following questions are case-based. Read the case carefully and answer the questions that follow.

Separating substances is an essential process in various industries. By separating substances, we can obtain pure materials and products. Winnowing is used to separate grains from the chaff, utilizing wind to blow away lighter particles. Threshing is another method used to separate grains from husk and chaff. Magnetic separation is employed to separate iron filings from sand, attracting magnetic materials with a magnet. Decantation is used to separate liquids of different densities, such as oil from water. These methods are crucial in agriculture mining, and manufacturing. Winnowing and threshing are ancient techniques still used today. Magnetic separation is a modern method used in recycling and waste management. Decantation is used in laboratories and industries to separate mixtures. By separating substances, we can obtain pure materials and products.

Question 1.
Name the method used to separate a mixture of two liquids that do not mix.

_____

Question 2.
Name the method that is used to separate grain from stalks.

_____

Question 3.
Define Sedimentation.

_____

Question 4.
A construction worker has a mixture of sand and pebbles and wants to separate the sand from the pebbles. What method should he use to remove the pebbles and other particles from the sand?

_____

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ADOLESCENCE : A STAGE OF GROWTH AND CHANGE

Fill in the blanks

1. The period of adolescence usually ranges from _____ years.

2. The onset of _____ is marked by physical and emo□onal changes. 3. _____ appears due to increased oily secre□ons.

4. The menstrual cycle usually occurs every _____ days.

5. Hormones are produced in response to signals from the _____.

6. Changes not related to reproduc□on are called _____ characteris□cs

. 7. _____ is a bump in the throat seen in boys.

8. Vitamin _____ is important for blood and nerve func□ons.

Mul□ple Choice Ques□ons (MCQs)

1. Adolescence typically begins at the age of: (a) 5 years (b) 10 years (c) 20 years (d) 15 years

2. Which of the following is a secondary sexual characteris□c? (a) Produc□on of eggs (b) Growth of facial hair (c) Menstrua□on (d) Fer□liza□on

3. Menstrua□on in girls usually lasts for: (a) 1–2 days (b) 3–7 days (c) 10–15 days (d) One full month

4. Which hormone controls changes in adolescents? (a) Insulin (b) Estrogen (c) Hormones in general (d) Vitamin D

5. The sanitary pad disposal method involves: (a) Throwing in open (b) Burning openly (c) Flushing in toilet (d) Wrapping in newspaper & pu□ng in dustbin

True or False

1. Adolescence is only about physical growth.

2. Acne in teens is caused by hormonal changes.

3. Boys and girls undergo the same physical changes during adolescence

4. Hormones control most changes in adolescence.

5. Menstrua□on stops by age 20.

6. Puberty and adolescence begin at the same age for everyone.

7. Proper hygiene can help prevent infec□ons.

8. Cyberbullying is a form of digital harassment.

1. What is adolescence? Why is it considered an important stage of life?

Q2. What is puberty? How is it related to adolescence?

Q3. What are hormones? How do they affect adolescents?

Q4. List three emo□onal or behavioral changes observed during adolescence. Q5. Why do some adolescents get pimples or acne?

LONG QUESTION

Q1. Why is personal hygiene especially important during adolescence?

Q2. Name some nutrients adolescents require and explain their importance.

Q3. What are the harmful effects of using substances like tobacco or alcohol during adolescence?

Q4. How can adolescents handle peer pressure to use harmful substances?

HEAT TRANSFER IN NATURE

Question 1.
Fill in the blanks by rearranging the words given with each sentence.
(a) In liquids and gases, heat is transferred mainly by the process of _____ [covtenicon].
(b) The heat from the Sun reaches us by the process of _____ [itnodiara].
(c) In a _____ [ase] breeze, cool air from the sea moves towards the land.
(d) During the night, the land cools down faster than the sea. This causes a _____ [dnal] breeze.
(e) Water from oceans, lakes, and rivers changes into water vapour during the process of _____ [porevataoin].
Answer:
(a) Convection
(b) Radiation
(c) Sea
(d) Land
(e) Evaporation

uestion 2.
Complete the blanks by choosing the appropriate words from the box given below.
(a) The process of water vapour changing into tiny droplets to form clouds is called _____ [evaporation/condensation].
(b) The continuous movement of water between the earth and atmosphere is called the _____ [water wheel/water cycle].
(c) In the afternoon, the land becomes warmer than the sea, and air moves from land to sea. This is called a _____ [sea/land] breeze.
(d) In solids, heat is transferred from particle to particle mainly by _____ [conduction/convection].
(e) Radiation does not need a _____ [medium/tube] to transfer heat.
Answer:
(a) Condensation
(b) Water Cycle
(c) Land
(d) Conduction
(e) Medium

Question 1.
Shopkeepers selling ice blocks usually cover them with jute sacks. Explain why.

Answer:
The layers of Jute traps the air in between the fibres. The trapped air prevents the flow of heat from surroundings to the ice and hence prevents it from melting.

Question 2.
Why do we wear light coloured cotton clothes when it is hot?
Answer:
Light coloured cotton clothes give us a feeling of coolness by reflecting heat.

Question 3.
What do you mean by the transfer of heat?
Answer:
The heat flows from a hotter object to a colder object. This process is called transfer of heat.

Question 4.
How does heat transfer in water or air?
Answer:
By convection

Question 5.
How does heat transfer in solids?
Answer:
By conduction

Question 6.
To keep her soup warm, Paheli wrapped the container in which it was kept with a woollen cloth. Can she apply the same method to keep a glass of cold drink cool? Give reason for your answer.
Answer:
Yes, she can. The air trapped between the layers of wool is a poor conductor of heat. The trapped air prevents the flow of heat from surroundings to get inside the woollen layers and vice versa and hence prevents it from getting cool down or getting warm respectively.

Question 7.
Give two examples each of conductors and insulators of heat.
Answer:
Conductors aluminium, iron Insulators plastic, wood.

Question 8.
What are conductors?
Answer:
Substances which allow heat to pass through them are called conductors.

Question 9.
What are insulators?
Answer:
Materials which do not allow heat to pass through them are called insulators.

Question 10.
What is sea breeze?
Answer:
The movement of air from the sea towards the land during daytime in coastal areas is called the sea breeze.

Question 11.
What is land breeze?
Answer:
The cool air from the land moves towards the sea at night in coastal areas is called land breeze.

Question 12.
Name the form of energy that causes hotness or coolness.
Answer:
Heat.

Question 13.
What are the various methods of transfer of heat?
Answer:
There are three methods of transfer of heat:

1. Conduction
2. Convection
3. Radiation

Question 14.
What is infiltration?
Answer:
It is the process by which water from the surface of the Earth passes through the soil and rocks, and gets stored as groundwater beneath the Earth's surface.

Question 15.
Name the processes involved in the water cycle.
Answer:
The main processes involved in the water cycle are:

1. Evaporation
2. Condensation
3. Precipitation
4. Transpiration

Question 16.
Name the underground layers that stores water.
Answer:
Aquifers

Question 17.
What ensures that the groundwater sources are recharged?
Answer:
The water cycle

Question 18.
Why can water move through gravel more easily?
Answer:
Because the spaces between the gravel particles are wider and open.

Question 19.
What is transpiration?
Answer:
It is process by which water evaporates from the leaves of trees and plants.

Question 20.
What does water cycle helps in?
Answer:
Water cycle helps in redistribution and replenishment of water in rivers, lakes and oceans.

Question 21.
When does land breeze occurs?
Answer:
It occurs at night.

Question 22.
When does sea breeze occurs?
Answer:
It occurs during the day.

Question 23.
What is radiation?
Answer:
It is the process of transfer of heat in which no medium is required.

Question 24.
Why does hot air rise?
Answer:
Hot air expands, becomes lighter and rises up.

Question 25.
What happens when a partially inflated balloon is placed in the Sun?
Answer:
When the air inside the balloon is heated, it expands, causing the balloon to increase in size.

Question 26.
Which process brings rain, snow and hail?
Answer:
Precipitation.

Question 27.
What is groundwater?
Answer:
Water stored in underground pore spaces of soil and rocks is called groundwater.

Question 28.
Name one method to recharge groundwater.
Answer:
Rainwater harvesting

Question 29.
What do you mean by convection?

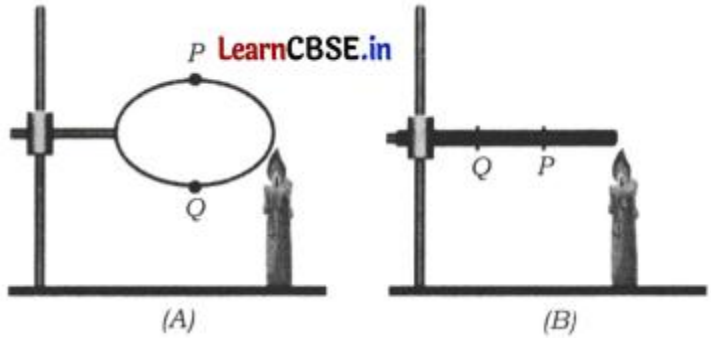
Answer:
The process of hotter liquid or gases transferring heat to the colder surroundings is known as convection.

Heat Transfer in Nature Class 7 Short Question Answer

Question 1.
Look at figure. Mark where the heat is being transferred by conduction, by convection and by radiation.

Answer:

Question 2.
In the arrangements A and B shown in Figure, pins P and Q are fixed to a metal loop and an iron rod with the help of wax. In which case are both the pins likely to fall at different times? Explain.



Answer:
In case of 'B' the pin at position P will fall first followed by pin at position Q as the heat will reach pin P first. Whereas in case of 'A' the heat will travel in both the directions and as a result pins at position P and Q will fall simultaneously.

Question 3.
In places of hot climate, it is advised that the outer walls of houses be painted white. Explain.
Answer:
In places of hot climate, it is advised that the outer wall of houses be painted white because white colour reflects heat and the houses do not heat up too much.

Question 4.
For setting curd, a small amount of curd is added to warm milk. The microbes present in the curd help in setting if the

temperature of the mixture remains approximately between 35°C to 40°C. At places, where room temperature remains much below the range, setting of curd becomes difficult. Suggest a way to set curd in such a situation.
Answer:
To maintain the favourable temperature for the microbes to turn the milk to curd, the container can be wrapped by woollen material so that the wool used will trap the air in between. The trapped air will prevent the flow of heat from surroundings to get inside the woollen layers and vice versa and hence prevents it from getting cool down or getting warm respectively. The container can also be kept in the sun.

MEASUREMENT OF TIME AND MOTION

QUES 1 On the basis of the following table, calculate the speed of the car between 9:00 AM to 10:00 AM time interval.
Table: Odometer reading at different times of the journey

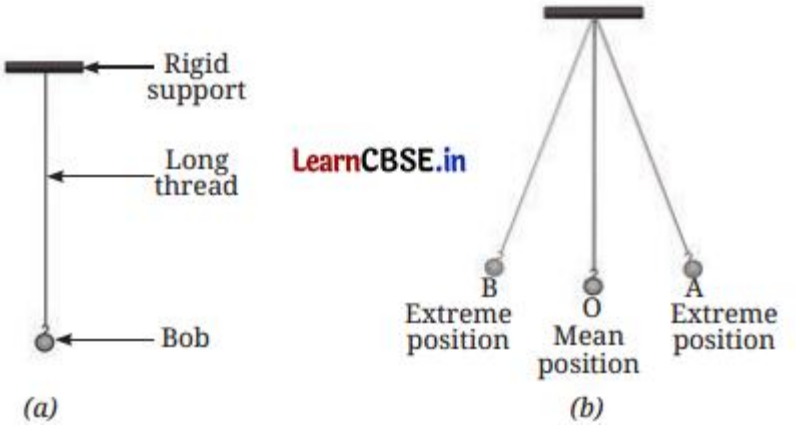
Time management courses

Time (AM)	Odometer reading	Distance from the starting point
8:00 AM	36540 km	0 km
8:30 AM	36560 km	20 km
9:00 AM	36580 km	40 km
9:30 AM	36600 km	60 km
10:00 AM	36620 km	80 km

Answer:
Initial time = 9.00 AM
Final time = 10:00 AM
Initial reading = 36580 km
Final reading = 36620 km
Total distance = 36620 – 36580 = 40 km
Total time taken = 9:00 AM – 10:00 AM = 1 h
We Know That
Speed = Total distance covered/Total time tahen
= 40 km/ 1h = 40 km/h

Measurement of Time and Motion Class 7 Long Question Answer

Question2.
What is a simple pendulum? Explain how does it perform oscillatory motion.
Answer:
A simple pendulum consists of a small metallic ball or a piece of stone suspended from a rigid stand by a thread. The metallic ball is called bob of the pendulum.



When the bob of the pendulum is released after taking it slightly one side, it starts to move to and fro. The to-and-fro motion of a simple pendulum is an example of an oscillatory motion.

Question 3
Explain uniform and non-uniform linear motion with daily life examples.
Answer:
Uniform linear motion: An object is said to be in uniform linear motion if it covers equal distances in equal intervals of time along a straight line. For example, a person walking on a straight at the same speed. Non-uniform linear motion: An object is said to be in non-uniform linear motion if it cover unequal distances in equal intervals of time along a straight line. For example, a car moving on a straight road with changing speed.

Simple pendulum kit

Question 3.
Ravi travels from his house to the market. On Monday, he takes an auto and covers 6 km in 20 minutes. On Tuesday, he rides his bicycle and covers the same distance in 40 minutes.
(i) What is his speed while going by auto in km/h?
Answer:
Given: Distance = 6 km Distance
(i) Speed = Distance Time
Time = 20 minutes = 0.33 hours
Speed = 60.33 = 18.18 km/h

(ii) What is his cycling speed in m/s?
Answer:
Distance = 6 km = 6000 m,
Time = 40 minutes = 2400 seconds
Speed = 60002400 = 2.5 m/s

(iii) What is his average speed for both trips in km/h?
Answer:
Total distance = 6km + 6km – 12km
Total time taken – 0.33 hours + 0.66
hours = 0.99 hours
Average speed = 12 km0.99 hours
= 12.12 km/h

Question 4.
During a science experiment, a student sets up a simple pendulum in the lab. She observes that the pendulum completes

40 complete oscillations in 80 seconds.
(i) Calculate the time period of the pendulum.
(ii) If the number of oscillations is doubled, but the total time also becomes double, will the time period change? Explain.
Answer:
Given: Number of oscillations = 40,
Total time = 80 seconds
(i) Time period (T) =
T = 8040 = 2 seconds

(ii) If the number of oscillations becomes 80 and total time becomes 160 seconds.
T = 16080 = 2 seconds

MORE QUES

Question 1.
If a cyclist moves along a straight road covers unequal distances in equal time intervals, the motion is
(a) uniform linear motion
(b) non-uniform linear motion
(c) periodic motion
(d) oscillatory motion.

Question 2.
Convert 54 km/h into m/s.
(a) 15 m/s
(b) 20 m/s
(c) 12 m/s
(d) 18m/s.

Question 3.
A vehicle is moving at a speed of 50 km/h. How much time will it take to cover a distance of 100 km?
(a) 4 hours
(b) 3 hours
(c) 2 hours
(d) 1 hour

Question 4.
Read the given statements and select the correct option.
Assertion (A): If two objects cover the same distance in different times, the one that takes more time has greater speed.
Reason (R): Speed increases as time taken increases for the same distance.
(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.

Question 5.
Match the items in Column A to those in Column B:

Column A	Column B
(i) Distance	(P) Measures distance travelled
(ii) Odometer	(q) km/h
(iii) Hour, minute, second	(r) Speed x Time
(iv) Speed	(s) Traditional units of time

(a) (i) – (r), (ii) – (q), (iii) – (s), (iv) – (P)
(b) (i) – (q), (ii) – (p), (iii) – (s), (iv) – (r)
(c) (i) – (r), (ii) – (p), (iii) – (s), (iv) – (q)
(d) (i) – (r), (ii) – (q), (iii) – (p), (iv) – (s)

Physics textbooks

Question 6.
In which unit is the distance measured by an odometer usually expressed?

Question 7.
Which ancient device used sand to measure time?

Question 8.
What type of motion does a pendulum exhibit?

Question 9.
What is a sundial?

Question 10.
What is the basic unit of speed?

Question 11.
Why can not sundials be used at night to measure time?

Measurement tools kit

Question 12.
A car travels 60 km in 30 minutes. What is its speed in km/h?

Question 13.
What makes a train faster compared to a cycle?

Question 14.
If an object travels different distances in equal time intervals, how do we calculate speed?

Question 15.
What type of motion is shown by a person running at a uniform speed on a straight road? Explain.

LIFE PROCESS IN ANIMALS

Question 1.
Given below from (i) to (iv) are some food items.
(i) Boiled and mashed potato
(ii) Glucose solution
(iii) A slice of bread
(iv) Mustard oil

Which of the above will give a blue-black colour when tested with iodine?
(a) (i) and (ii)
(b) (i) and (iii)
(c) (ii) and (iii)
(d) (iii) and (iv)
Answer:
(b) (i) and (iii)

Question 2.
During inhalation, the diaphragm:
(a) Relaxes and moves up
(b) Contracts and moves down
(c) Reduce space in the lungs
(d) Closes the windpipe
Answer:
(b) Contracts and moves down

Question 3.
Which of the following is NOT part of the digestive system?
(a) Oesophagus
(b) Pancreas
(c) Kidney
(d) Stomach
Answer:
(c) Kidney

Question 4.
The small balloon-like sacs in the lungs where gas exchange occurs are called:
(a) Bronchi
(b) Alveoli
(c) Windpipe
(d) Nasal passage
Answer:
(b) Alveoli

Question 5.
What is the main function of the lungs in the respiratory system?
(a) Pump blood
(b) Absorb nutrients
(c) Exchange gases
(d) Digest food
Answer:
(c) Exchange gases

Question 6.
Breathing is a process that
(i) provides O_2 to the body.
(ii) breaks down food to release energy.
(iii) helps the body to get rid of CO_2.
(iv) produces water in the cells.
Which of the following gives the correct combination of functions of breathing?
(a) (i) and (ii)
(b) (ii) and (in)
(c) (i) and (in)
(d) (ii) and (in)
Answer:
(c) (i) and (in)

Question 7.
The swallowed food moves downwards in the alimentary canal because of
(a) force provided by the muscular tongue
(b) the flow of water taken with the food
(c) gravitational pull
(d) the contraction of muscles in the wall of the food pipe.
Answer:
(d) the contraction of muscles in the wall of the food pipe.

Question 8.
The finger-like outgrowths of Amoeba help to ingest food. However, the finger-like outgrowths of the human intestine help to
(a) digest the fatty food substances
(b) make the food soluble
(c) absorb the digested food
(d) absorb the undigested food.
Answer:
(c) absorb the digested food

Online study solutions

Question 9.
What is the role of saliva in digestion?
(a) It digests proteins.
(b) It breaks down fats.
(c) It moistens food and begins starch digestion.
(d) It neutralises stomach acid.
Answer:
(c) It moistens food and begins starch digestion.

Question 10.
During the process of exhalation, the ribs move
(a) down and inwards.
(b) up and inwards.
(c) down and outwards.
(d) up and outward.

Answer:
(a) down and inwards.

Question 11.
The main purpose of respiration is to:
(a) Produce oxygen
(b) Eliminate waste
(c) Produce energy
(d) Digest food.
Answer:
(c) Produce energy

Past exam papers

Life Processes in Animals Class 7 Very Short Question Answer

Question 1.
Name the process by which energy is obtained by a living organism.
Answer:
Respiration.

Question 2.
What is the percentage of exhaled carbon dioxide during the breathing mechanism?
Answer:
Nearly 4-5%.

Question 3.
What is the length of the small intestine?
Answer:
About 6 meters.

Animal science textbook

Question 4.
Define the term egestion.
Answer:
The process of removal of faecal matter through the anus from time to time is called egestion.

Question 5.
What are ruminants?
Answer:
The animals in which partially digested food returns to the mouth and the animal chews it are called ruminants.

Question 6.
What is the role of the pancreas?
Answer:
The pancreas secrets pancreatic juice which is important for digestion process.

Question 7.
Which chemical would you select to test the presence of starch in the food item?
Answer:
Iodine solution

Organism biology book

Question 8.
Name the organ that constitutes respiration in fish.
Answer:
Gills.

Question 9.
Where is water absorbed in the digestive system?
Answer:
Water is absorbed in the large intestine.

Short Question Answer

Question 1.
Ruminants such as cows and buffaloes swallow their food hurriedly and then sit restfully and chew their food. Can you give the reason?
Answer:
Ruminants quickly swallow the food and store it in an isolated part of the stomach called the rumen, where the food gets partially digested and is called cud, which later on returns to the mouth in the form of small lumps and then is chewed up by the animal. This process is called rumination.

Past exam papers

Question 2.
Explain the process of breathing.
Answer:
The process of breathing happens in two steps inhalation (breathing in) and exhalation (breathing out).
(i) When we inhale air, the diaphragm moves downwards and the chest cavity expands. This makes space for the lungs to fill with air. Air rushes in and fills the tiny air sacs in the lungs called alveoli.

(ii) When we exhale, the diaphragm moves upwards and the chest cavity becomes smaller. This pushes out the air containing carbon dioxide and water vapour from the lungs.

Question 3.
Explain digestion in the mouth.
Answer:
In the mouth, the food is grind with the help of teeth. The saliva in the mouth breaks down starch into sugar.

Question 4.
Explain the process of digestion in the small intestine.
Answer:
The small intestine is a long, coiled tube (6 metres) where most of the digestion and absorption of food happens. Digestive juices from the liver (bile) and the pancreas (pancreatic juice) are mixed with the food in the small intestine. These juices help to break down fats, proteins, and carbohydrates into simpler forms. After digestion, the tiny finger¬like structures on the inner walls of the small intestine absorb the nutrients into the blood.

Online study solutions

Question 5.
Draw a diagram of the oesophagus and stomach to show the movement of food.
Answer:

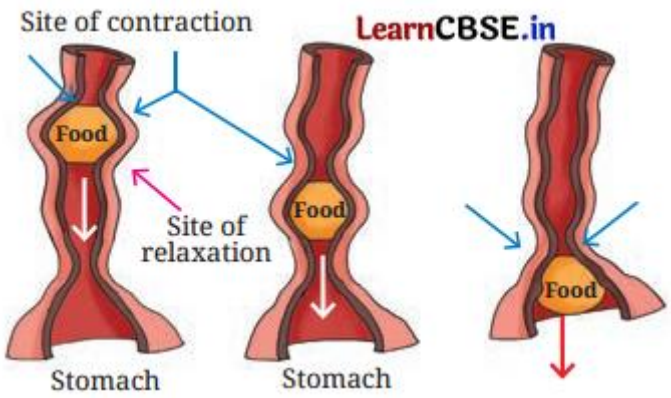


Fig. Movement of food

Question 6.
Explain the digestive system of a bird with the help of a diagram.
Answer:

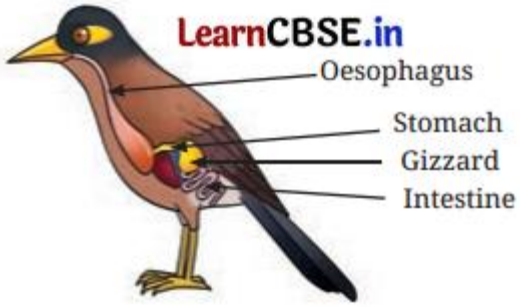


Fig. Digestive system in birds

Animal science textbook

Question 7.
What do you understand by passive smoking?
Answer:
Passive smoking, also known as second¬hand smoking, happens when a non-smoker breathes in the smoke from someone else's cigarette, cigar, or pipe. This smoke contains harmful chemicals, just like the smoke inhaled by the smoker.

Question 8.
Pick the odd-one-out from each of the groups given below on the basis of respiratory organs. Give reason for your answer.
(a) cockroach, grasshopper, snail, ant
(b) lizard, cow, earthworm, snake
(c) crocodile, whale, dolphin, fish
(d) snake, tadpole, crow, goat
Answer:
(a) Snail, as it does not breathe through trachea.
(b) Earthworm, because unlike others earthworm breathes through its skin and does not have lungs.
(c) Fish, because unlike others most fishes breathe through their gills and do not have lungs.
(d) Tadpole, because unlike others tadpole breathes through gills and does not have lungs.

CLASS 8 WINTER BREAK HOMEWORK 2025-26

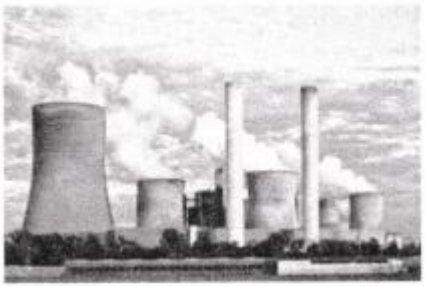
COMPLETE THIS WORKSHEET IN 5 DAYS

HEALTH :THE ULTIMATE TREASURE

Question 1.
Which of the following is/are considered good habits for maintaining a healthy lifestyle?
A. Eating a balanced diet with plenty of fruits and vegetables
B. Exercising regularly and staying active
C. Spending too much time on mobile phones or digital screens
D. Getting enough sleep every night

Choose the correct answer from the options given below.
(a) A, B, and D only
(b) A and C only
(c) B and D only
(d) All of these
Answer:
(a) A, B, and D only

Question 2.
A person notices that whenever walking near an industrial area, breathing feels difficult and eyes start to water. What is the most likely explanation?



(a) Clean air in industrial zones contains extra moisture
(b) Factories release pollutants that irritate the respiratory system
(c) Dust in clean air causes discomfort
(d) Fresh air increases sensitivity to smells
Answer:
(b) Factories release pollutants that irritate the respiratory system

Question 3.
What makes non-communicable diseases different from communicable diseases?
(a) They spread quickly from person to person
(b) They are caused by bacteria and viruses
(c) They are not spread from one person to another and may be linked to lifestyle
(d) They only occur in tropical countries
Answer:
(c) They are not spread from one person to another and may be linked to lifestyle

Question 4.
Analyse the image given below for the symptoms of a disease and identify the causative agent of the same.

(a) Virus
(b) Bacteria
(c) Worm
(d) Protozoa
Answer:
(a) Virus

Question 5.
Carefully read the following list of diseases. Some of them are communicable, while others are non-communicable.
I. Typhoid
II. Diabetes
III. Chickenpox
IV. Cancer

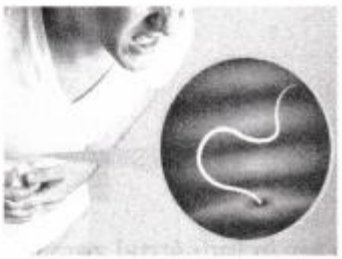
Based on the information provided in the text, how many of these diseases are communicable?
(a) One
(b) Two
(c) Three
(d) Four
Answer:
(b) Two

Question 6.
Which of the following diseases can cause, sore throat, fever, cough, and by ache?

(a) 

(b) 

(c) 

(d) 

Answer:
(b)

Question 7.
Which of the following match-pairs is correct?
(a) Typhoid – Lungs
(b) Tuberculosis – Liver
(c) Ascariasis – Intestine
(d) Hepatitis A – Intestine
Answer:
(c) Ascariasis – Intestine

Question 8.
Which of the following statements about malaria is correct?
(a) Malaria is caused by a virus and affects only the skin
(b) Malaria is caused by protozoa and affects the liver and blood
(c) Malaria spreads through contaminated food
(d) Malaria is a non-communicable disease
Answer:
(b) Malaria is caused by protozoa and affects the liver and blood

Question 9.
Which combination of factors most commonly contributes to diabetes
(a) Hormonal imbalance, excessive iodine, high protein diet
(b) Excessive exercise, low-fat diet, infections
(c) Genetic disorders, bacterial infection, mosquito bites
(d) Lack of physical activity, unhealthy eating habits, being overweight
Answer:
(d) Lack of physical activity, unhealthy eating habits, being overweight

Question 10.
Which of the following statements about vaccines is correct?
(a) Vaccines provide acquired immunity by helping the immune system recognise harmful germs
(b) Vaccines are effective only against non-communicable diseases
(c) Vaccines cure diseases after a person gets sick
(d) Vaccines are made only from live pathogens
Answer:
(a) Vaccines provide acquired immunity by helping the immune system recognise harmful germs

Question 11.
If a person stops taking antibiotics halfway through treatment becauselhdy start feeling better, what might happen?
(a) All bacteria in the body are destroyed permanently
(b) The remaining bacteria can become resistant and cause a stronger infection later
(c) The medicine becomes stronger when restarted
(d) The infection turns into a viral disease
Answer:
(b) The remaining bacteria can become resistant and cause a stronger infection later

Assertion-Reason Questions And Answers

The questions given below consist of two statements. One is labelled as Assertion and other is labelled as Reason.

Choose the correct answer from the options given below.
(a) Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.
(b) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
(c) Assertion is true, but Reason is false.
(d) Assertion is false, but Reason is true.

Question 1.
Assertion: Living in polluted surroundings increases the risk of illness.
Reason: Polluted air contains harmful substances that can affect breathing and health.
Answer:
(a) Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.

Question 2.
Assertion: Non-communicable diseases are becoming more common in India.
Reason: These diseases spread quickly from one person to another through direct contact.
Answer:
(c) Assertion is true, but Reason is false.

The Reason can be corrected as,
Non-communicable diseases do not spread from person to person. They are usually linked to lifestyle, diet, or environment.

Question 3.
Assertion: Typhoid is a non-communicable disease.
Reaso:n Typhoid mainly spreads through contaminated food and water.
Answer:
(d) Assertion is false, but Reason is true.

The Assertion can be corrected as,
Typhoid is a communicable disease caused by bacteria.

Question 4.
Assertion: Vaccination protects people by creating acquired immunity.
Reason: Antibiotics work the same way as vaccines to prevent infections.
Answer:
(c) Assertion is true, but Reason is false.

The Reason can be corrected as,
Antibiotics do not work like vaccines, they are used to treat bacterial infections, not to create immunity.

Question 5.
Assertion: Overuse of antibiotics can be dangerous.
Reason: Misusing antibiotics may lead to bacteria becoming resistant and harder to treat.

Answer:
(a) Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.

Fill in the Blanks

Question 1.
Fill in the blanks by using appropriate words from the box given below.

Edward Jenner, cancer, healthy, disease, pathogens, antibiotic resistance, cowpox, non communicable, antibiotics, regular exercise

(a) Eating a balanced diet, doing _____ and getting enough sleep are examples of _____ habits.
Answer:
regular exercise, healthy

Buy vitamins and supplements

(b) Organisms that cause _____, such as bacteria, viruses, fungi, worms, or protozoa, are called _____.
Answer:
diseases, pathogens

(c) Diseases like _____, diabetes and asthma are called diseases because they do not spread from person to person.
Answer:
cancer, non-communicable

(d) _____ discovered that people infected with _____ did not catch smallpox.
Answer:
Edward Jenner, cow pox

(e) When bacteria survive and multiply despite _____ treatment, it is called _____
Answer:
antibiotics, antibiotic resistance

Question 2.
Fill in the blanks by unjumbling the words given in the bracket:
(a) A _____ (essidae) is any condition that affects the normal working of the body or mind.
Answer:
disease

(b) _____ (erbutsisculo) is a communicable disease that mainly affects the lungs and spreads through the air when an infected person coughs or sneezes.
Answer:
tuberculosis

(c) _____ (mmniue) system helps the body to fight against disease-causing germs.
Answer:
immune

(d) The first antibiotic discovered by Alexander Fleming was called _____ (incillinep).
Answer:
penicillin

(e) The practice of using cowpox material to protect against smallpox was called _____ (nocavacinti).
Answer:
vaccination

Match the Following

Question 1.
Match each disease in Column I with the correct description in Column II.

Column I	Column II
(a) Typhoid	(i) Causes fever, sore throat, cough, and body ache
(b) Tuberculosis	(ii) Caused by bacteria; mainly affects the lungs
(c) Malaria	(iii) Spreads by mosquito bite; causes chills and fever
(d) Common cold	(iv) Spreads through contaminated food and water
(e) Diabetes	(v) Non- communicable disease linked to lifestyle

(a) _____
(b) _____
(c) _____
(d) _____
(e) _____
Answer:

Column I	Column II
(a) Typhoid	(iv) Spreads through contaminated food and water
(b) Tuberculosis	(ii) Caused by bacteria; mainly affects the lungs
(c) Malaria	(iii) Spreads by mosquito bite; causes chills and fever
(d) Common cold	(i) Causes fever, sore throat, cough, and body ache
(e) Diabetes	(v) Non-communicable disease linked to lifestyle

Electricity: Magnetic and Heating Effects

Question 1.
Which material is used to make electromagnets stronger?
(a) Plastic
(b) Wood
(c) Iron
(d) Glass
Answer:
(c) Iron

Question 2.
In an electric heater, why is a coiled wire used instead of a straight wire for the heating element?
(a) To make it look more attractive
(b) To increase resistance and produce more heat
(c) To reduce the cost of manufacturing
(d) To make it easier to replace when broken
Answer:
(c) To reduce the cost of manufacturing

Question 3.
During a classroom demonstration, the teacher showed that a voltaic cell stops working after some time because
(a) the metal electrodes get too hot
(b) the chemical get used up
(c) the wires become loose over time
(d) the plastic container develops cracks
Answer:
(b) the chemical get used up

Question 4.
When comparing dry cells and rechargeable batteries, which statement's correct?
(a) Dry cells can be reused multiple times like rechargeable batteries
(b) Rechargeable batteries are cheaper in the long run than dry cells
(c) Both work exactly on the same principle
(d) Dry cells are more environmentally friendly than rechargeable ones
Answer:
(b) Rechargeable batteries are cheaper in the long run than dry cells

Question 5.
Why do engineers use electromagnets in scrap yards instead of permanent magnets?
(a) Because permanent magnets are too expensive
(b) Because electromagnets can be switched on/off when needed
(c) Because permanent magnets don't attract iron
(d) Because electromagnets work without electricity
Answer:
(b) Because electromagnets can be switched on/off when needed

Question 6.
What precaution should be taken when disposing of used batteries from household devices?

(a) Throw them in regular trash for easy disposal
(b) Burn them to destroy harmful chemicals
(c) Recycle them through proper e-waste channels
(d) Bury them in the backyard
Answer:
(b) Burn them to destroy harmful chemicals

Question 7.
What is the primary reason for using nichrome rather than copper in electric heating devices?
(a) Nichrome is much cheaper than copper
(b) Nichrome has higher electrical resistance
(c) Nichrome doesn't conduct electricity
(d) Nichrome changes colour when heated
Answer:
(c) Nichrome doesn't conduct electricity

Question 8.
In an electric circuit, if we keep increasing the current through a wire, what eventually happens?
(a) The wire becomes superconducting
(b) The wire's resistance decreases automatically
(c) The wire may overheat and get damaged
(d) The wire starts producing light
Answer:
(b) The wire's resistance decreases automatically

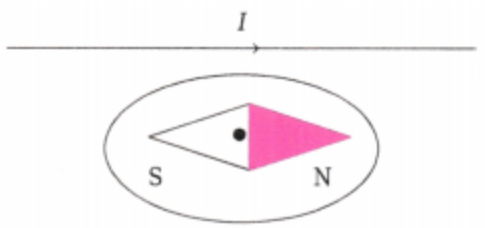
Question 9.
Why are lithium-ion batteries preferred for modern electric vehicles?
(a) Because they are the heaviest type of battery
(b) Because they can store more energy for their size
(c) Because they cannot be recharged
(d) Because they work best in cold weather
Answer:
(d) Because they work best in cold weather

Question 10.
What important function does the Earth's magnetic field serve for livh^g.ar§anisms?
(a) It helps regulate the Earth's temperature
(b) It protects from harmful solar radiation
(c) It makes compasses point randomly
(d) It increases atmospheric pressure
Answer:
(b) It protects from harmful solar radiation

Question 11.
If Earth's magnetic field suddenly disappeared, which technological system would be affected most immediately?
(a) Satellite communications
(b) Compass-based navigation
(c) Cyclone prediction systems

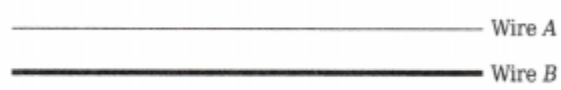
(d) Electromagnets
Answer:
(b) Compass-based navigation

Question 12.
In the figure, a straight vertical wire is carrying current I and a magnetic compass is placed near it. The compass needle is observed to deflect to the right.



What does this deflection of the compass needle indicate?
(a) The wire has no magnetic effect
(b) The compass is faulty
(c) The magnetic field is present around the wire
(d) The current is flowing downward
Answer:
(c) The magnetic field is present around the wire

Question 13.
In the figure, two wires — Wire A and Wire B — are made of the same material and connected to identical batteries. Both are used as heating elements.



Which wire will get hotter and why?
(a) Wire B, because it allows more current to flow
(b) Wire B, because it has more resistance
(c) Both will get equally hot
(d) Wire A, because it has higher resistance
Answer:
(b) Wire B, because it has more resistance

Assertion-Reason Questions And Answers

The questions given below consist of an Assertion and a Reason. Based on that, choose the appropriate option.
(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
(b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
(c) Assertion is true, but Reason is false.
(d) Assertion is false, but Reason is true.

Question 1.
Assertion: An electromagnet can lift heavier iron objects when more turns are added to its coil.
Reason: Increasing coil turns strengthens the magnetic field for the same current.
Answer:
(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

Question 2.
Assertion: An electromagnet used in cranes can lift heavy scrap metal only when the electric current is flowing through it.

Reason: Electric current produces a magnetic field that disappears when the current is switched off.
Answer:
(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

Question 3.
Assertion: An iron nail placed inside a coil has no effect on the coil's magnetic strength.
Reason: Iron is a soft magnetic material that enhances the magnetic field inside a coil.
Answer:
(d) Assertion is false, but reason is true,
an iron nail placed inside a coil increases the magnetic strength of the coil.

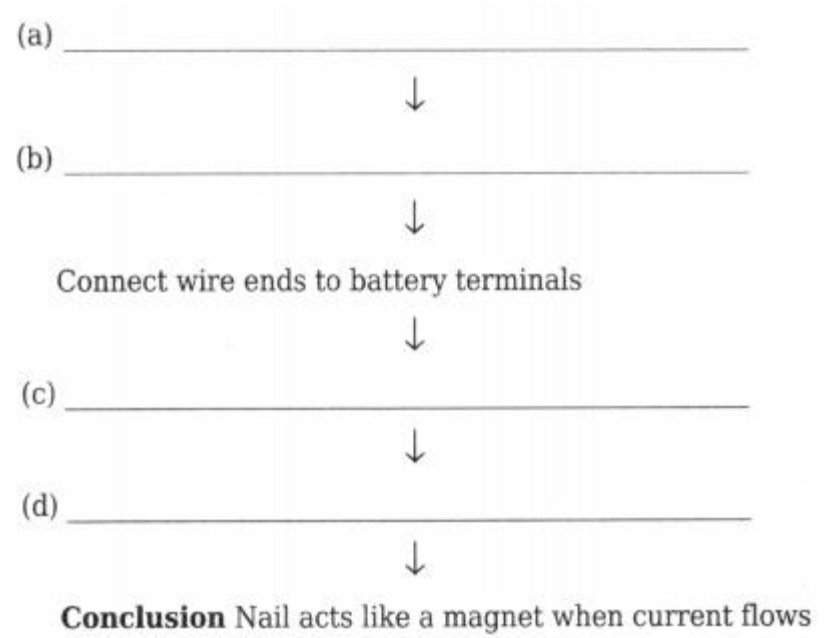
Question 4.
Assertion: A permanent magnet is preferred an electromagnet in a scrapyard crane.
Reason: Electromagnets lose their magnetic field when the electric supply is cut off.
Answer:
(d) Reason is true, but the assertion is false,
electromagnets are preferred in a scrapyard crane because one can control its magnetic effects by controlling electric supply.

Question 5.
Assertion: NichrOme is widely used in electric wires for household wiring.
Reason: Nichrome has higher resistance than copper and does not melt easily.
Answer:
(d) Assertion is false, but Reason is true.
Nichrome is not used in household wiring but copper is, due to its low resistance.

Flow Chart Completion
Complete the flowchart showing the steps of an activity to observe the magnetic effect of electric current.

Steps to Choose From

- Wrap insulated copper wire around an iron nail
- Collect materials like battery, wire, nail, and clips
- Observe if paper clips stick to the nail
- Bring nail near some iron paper clips



Answer:
(a) Collect materials like battery, wire, nail, and clips
(b) Wrap insulated copper wire around an iron nail
(c) Bring nail near some iron paper clips
(d) Observe if paper clips stick to the nail

Fill in the Blanks

Question 1.
Fill in the blanks by choosing the appropriate words from the box below:

electromagnet, current, magnetic, compass, heating, iron, rechargeable, coil, paste, dry cell

(a) The magnetic strength of an electromagnet increases if an _____ core is placed inside the _____.
Answer:
iron, coil

(b) A strong _____ is used in cranes to lift scrap metal easily.
Answer:
electromagnet

(c) A _____ is used to detect the direction of a magnetic field.
Answer:
compass

(d) A _____ contains a zinc case and a carbon rod with an electrolyte in the form of a moist _____.
Answer:
dry cell, paste

(e) _____, batteries are better for the environment as they reduce waste.
Answer:
rechargeable

Question 2.
Fill in the blanks by unjumbling the words given in the bracket:
(a) The flow of electric _____ (curnrte) can produce both heat and magnetism.
Answer:
current

(b) Hans Christian _____ (deterso) discovered the magnetic effect of current.
Answer:
orested

(c) Devices like electric irons and kettles work on the _____ (inatehg) effect of electric current
Answer:
heating

(d) The moist paste in a dry cell acts as an _____(lretceolyte).
Answer:
electrolyte

(e) When many lemons are connected together, they form a simple _____ (yrtabte).
Answer:
battery

Match the Following

Question 1.
Match the terms in Column I with their related explanations in the Column II.

Column I	Column II
(a) Electromagnet	(i) Produces heat when current flows
(b) Dry cell	(ii) Points north south
(c) Nichrome wire	(iii) Works only when current flows
(d) Compass	(iv) Used in remotes and clocks
(e) Heating effect of current	(v) Zinc container and carbon rod
(f) Structure of a dry cell	(vi) Converts electric energy to heat

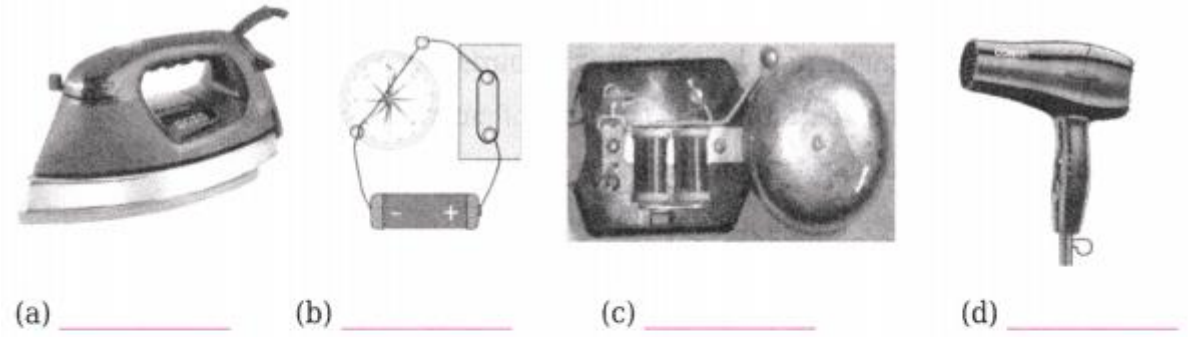
Answer:

Column I	Column II

(a) Electromagnet	(iii) Works only when current flows
(b) Dry cell	(iv) Used in remotes and clocks
(c) Nichrome wire	(i) Produces heat when current flows
(d) Compass	(ii) Points north south
(e) Heating effect of current	(vi) Converts electric energy to heat
(f) Structure of a dry cell	(v) Zinc container and carbon rod

Question 2.
Look at the pictures given below carefully. Each picture shows a device or activity related to the effects of electric current. Classify the pictures into the following two categories:

Magnetic Effect of Current, Heating Effect of Current



Answer:
(a) Heating effect of current.
(b) Magnetic effect of current.
(c) Magnetic effect of current.
(d) Heating effect of current.
(e) Magnetic effect of current.
(f) Heating effect of current.
(g) Heating effect of current.

EXPLORING FORCES

1. A wooden block is pushed on a rough table and stops after some distance. Why?

Q2. A 1 kg object has a weight of about 10 N on Earth. What will be its weight on the Moon ($g \approx 1.6\ m/s^2$)?

Q3. A spring balance has marks 0 to 5 N with 10 equal divisions between each newton. What is its least count?

Q4. Two balloons rubbed with wool repel each other. Which force is acting and why?

Q5. A stone sinks in water but a sealed empty plastic bottle floats. Why?

Pressure, winds, Storms & Cyclones

Q1. Why are dam walls broader at the base?

Q2. Why aren't we crushed by atmospheric pressure?

Q3. What causes a sea breeze?

Q4. What simple safety rule helps prevent roofs from blowing off in storms?

Q5. What is a thunderstorm?

Q6. Explain, with an example, how area affects pressure in daily life.

Q7. How does height of a liquid column affect pressure? Mention one application.

Q8. Describe briefly how winds are formed.

Q9. How does lightning form inside storm clouds?

Q10. Why are cyclones dangerous?

Particulate nature of matter

Matter is made up of small_____.

Q2. The forces of attraction between the particles are _____ in solids, _____ in liquids and _____ in gases.

Q3. Solid, liquid and gas are called the three _____ of matter.

Q4. The smell of perfume gradually spreads across a room due to _____.

Q5. Gas molecules at higher temperatures have more _____ than at cooler temperatures.

Q6. Forces of attraction in liquids are _____ than in solid**.**

Q1. What are the basic building blocks of matter called?

Q2. Why do solids have a fixed shape?

Q3. What happens to sugar particles when dissolved in water?

Q4. Why can gases be compressed easily?

Q5. What causes the fragrance of an incense stick to spread in a room?

Nature of matter, elements ,compounds and mixtures

Q1. A _____ consists of two or more substances that retain their individual properties.

Q2. Air is a _____ mixture of gases like nitrogen and oxygen.

Q3. A pure substance made of one type of atom is called an _____.

Q4. Water is a _____ made of hydrogen and oxygen in a fixed ratio.

Q5. _____ in air reacts with lime water to form calcium carbonate.

Q6. Bronze is an _____ of copper and tin.

Q7. _____ particles in air are considered pollutants, not part of its natural composition.

Q8. Heating sugar produces _____ and water droplets.

Q9. Iron sulfide is a _____ formed by heating iron and sulfur.

Q10. _____ is used to make buildings and vehicles due to its strength and light weight.

Q1. Why is poha a non-uniform mixture?

Q2. What gases are produced when electricity is passed through water?

Q3. How is a compound different from its elements?

Q4. Name one use of the compound sodium chloride in daily life.

Q5. Why are native minerals considered elements?

Q6. How can you confirm the presence of carbon dioxide in air?

Q7. Why is stainless steel stronger than pure iron?

Q8. What happens when iron and sulfur are heated together, and how does it differ from their mixture?

Q9. Why is sugar considered a compound and not an element?

Q10. How are elements like aluminium and compounds like water used in daily life?