L - 1: FOOD AND HEALTH

Quick Check (Pg. No. 6)

State true or false:

1. True 2. True 3. True 4. False

Practice Test - 1: (Pg. No. 10-11)

A. Tick (✓) the correct answers:

1. (c) protective 2. (c) fat 3.(a) roughage 4. (c) carbohydrates & fats
5. (a) boiling

B. Fill in the blanks:

1. more 2. body building 3. proteins
4. roughage and water 5. Vitamin A

C. Match the columns:

1. Vitamin A - Keeps our eyes and skin healthy
2. Iron - Rich in green leafy vegetables
3. Milk - Keeps our bones and teeth strong
4. Junk food - Does not contain good nutrients

D. Circle the odd one out:

1. Roughage - All three are nutrients while roughage is fibre.
2. Steaming - All three are methods of food preservation while steaming is cooking method.
3. Vitamin C - All three are minerals except vitamin C.
4. Paneer - It is the only vegetarian food among the given options. Fish, mutton and eggs are non-vegetarian.

E. State true or false:

1. True
2. False - Fat – rich food is called energy-giving food.
3. True
4. False - Growing children need more protein – rich food than grown-ups.

Practice Test - 2 (Pg. No. 11)

A. Tick (✓) the correct answers:

1. (a) carbohydrates 2.(b) lemon 3. (a) Fruits & vegetables
4. (d) prevents the spoilage of food

Short Answer Type Questions:

Q1. Why does a rickshaw puller needs more carbohydrates than an office goer?

Ans. Carbohydrates are energy giving food. The rickshaw puller do a lot of physical work so he need more carbohydrates than an office goer.

Q2. Why vegetables should be washed before they are cut?

Ans. Vegetables should be washed before they are cut to remove dust and germs from their peels.

Q3. Why we must take roughage in our meal?

Ans. We must take roughage in our meal because roughage is dietary fibre. It helps to remove waste material out of our body.

Q4. What is balanced diet?

Ans. The diet which has all the nutrients in the correct amount is called a balanced diet.

Q5. What are the functions of vitamin B in our body?

Ans. Vitamin B is needed for proper functioning of nervous and muscular system of our body.

Q6. What is food preservation?

Ans. The method of preventing food from getting spoilt is called food preservation.

Q7. Why is protein called a body-building nutrient?

Ans. Proteins build our muscles, repair the tissues and help us to grow, so they are called body-building food.

Q8. Why are patients given glucose by drip?

Ans. Patients are given glucose by drip because glucose is a carbohydrate that gives instant energy to the patient.

Q9. Why does a child needs more protein in the diet than grown ups?

Ans. A child needs more protein to grow well as proteins help to build muscles and repair tissues.

Long Answer Type Questions:

Q1. What is fat? What is its role?

Ans. Fats are energy-giving food. Roles of fats are :

1. It prevents heat loss from our body surface.
2. The stored fat is used when the body does not get sufficient food, such as in fasting.

Q2. Write important things to remember while cooking.

Ans. Following things are important to remember while cooking:

1. We should wash vegetables before cutting them and not after that.
2. We should soak pulses and cereals in water before boiling.
3. We should cook food in enough water.
4. We should avoid over cooking.

Activity – Draw and label food items containing different types of nutrients (two each).

Carbohydrates

Bread

Potato

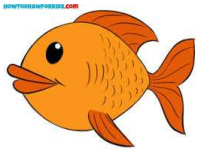
Fats

Oil

Ghee

Proteins

Pulses



Fish

Vitamins

Fruits

Vegetables

L - 8: CLOTHES WE WEAR

Quick Check (Pg. No. -101)

State true or false:

1. False - Light coloured clothes are preferred in summer.
2. False - because cotton clothes keeps us cool.
3. True

Test Match

Practice Test - 1 (Pg. No. : 104 - 105)

A. **Tick the correct answer:**

1. (c) Cotton 2. (a) Nylon 3. (d) all of these 4. (a) tough

B. **Fill in the blanks:**

1. White 2. Rayon 3. woollen 4. fire
5. traditions

C. **Match the columns:**

1. Cotton - Plant source
2. Silk - Animal source
3. Polyester - Synthetic fibre
4. Waterproof material - Raincoat

D. **Circle the odd one out:**

1. Silk - All three are synthetic fibres while silk is a natural fibre.
2. Nylon - All three are natural fibres while nylon is a synthetic fibre.
3. Shorts - All three are the clothes we wear in winter while shorts are worn in summer.
4. Police - All three are defence forces while police is not a defence force.

E. **State true or false:**

1. False - Raincoat is made from synthetic fibre
2. True
3. False - Silk is a natural fibre.
4. False - Woollen clothes should be stored with mothballs.
5. True

Practice Test - 2 (Pg. No. - 105)

A. **Tick the correct answer:**

1. (b) cotton 2. (b) absorb sweat 3. (b) kills germs 4. (c) they repel insects

B. **Short Answer Type Questions**:

Q1. What are synthetic fibres?

Ans. The fibres that are made in factories from chemicals and petroleum are called synthetic fibres. e.g. nylon, rayon, etc.

Q2. What is a uniform?

Ans. Uniform is a particular kind of dress people wear during their work.

Q3. When are synthetic clothes preferred?

Ans. Synthetic clothes are preferred during monsoon season.

Q4. What is silverfish?

Ans. Silverfish is an insect that eats woollen and silk clothes.

Q5. What are natural fibres? Explain their types.

Ans. Fibres that are obtained naturally either from plants or from animals are known as natural fibres. Natural fibres can be of two types:

Plant origin	Animal origin
Fibres that are obtained from plants. e.g. – linen, jute, cotton etc.	Fibres that are obtained from animals. e.g. – silk, wool etc.

Q6. Why people of different states in India wear different types of dresses?

Ans. People from different states in India wear different types of dresses based on their climatic conditions and traditions of the state.

Q7. Long time ago, before civilization, what did people wear?

Ans. Long time ago, before civilization, people used to wear leaves, bark of trees and animal skins as dresses.

Q8. Why do we wear different sets of clothes in different seasons?

Ans. We wear different sets of clothes in different seasons depending upon the climatic conditions.

Q9. What is the purpose of wearing a uniform in the school? Why you cannot come to school in casual wears?

Ans. Uniform is a particular kind of dress people wear. One type of school uniform is separate than the other school and so helpful to differentiate students.

Long Answer Type Questions:

Q1. Write three practices to take care of our clothes.

Ans. Three practices to take care of our clothes are:

(a) Cleaning : We should wash clothes with good quality soap or detergent.
(b) Mending : Torn clothes should be mended in time.
(c) Storing : Clothes should be stored with moth balls or with dried neem leaves.

Q2. Why do we prefer dark coloured, woollen clothes in winter and light coloured, cotton clothes in summer?

Ans. We prefer dark coloured woollen clothes in winter because they do not allow body heat to escape and keep us warm. We prefer cotton clothes in summer because cotton clothes reflect heat and keep us cool.

Q3. What are the differences between natural fibres and synthetic fibres?

Ans. Differences between natural fibres and synthetic fibres are:

Natural Fibres	Synthetic Fibres
1. Natural fibres are obtained from nature.	1. Synthetic fibres are artificial or man made fibres.
2. Natural fibres are obtained from plants and animals.	2. Synthetic fibres are made from chemicals and petroleum.
3. Natural fibre, like cotton absorbs sweat.	3. Synthetic fibres do not absorb sweat.
4. e.g. – cotton, silk and fur	4. e.g. – nylon, polyester and rayon

Activity – Paste fabric made of natural fibres obtained from plants & animals (two each).

L - 3 : MAKING OF FOOD

Quick Check (Pg. No. - 34)

A. Tick the correct answer:

1. (b) side veins 2. (b) chlorophyll 3. (c) leaves

Test Match (Pg. No. : 36 - 37)

Practice Test-1

A. **Tick the correct answer:**

1. (c) photosynthesis 2. (c) oxygen 3. (b) chlorophyll 4. (c) midrib

B. **Fill in the blanks:**

1. Sunlight, Chlorophyll 2. stomata 3. Broccoli
4. Blue-black colour 5. seed dispersal

C. **Match the columns:**

1. Leaf Blade - Traps sunlight 2. Spines - Leaves of cactus
2. Stomata - Underside of the leaf 4. Oxygen - Released by plants

D. **Circle the odd one out:**

1. Spines - All three are parts of a plant while spines are the modification of leaves in cactus.
2. Oxygen - All three are taken up during photosynthesis while oxygen is released after photosynthesis.
3. Coffee - All three are green vegetables while coffee is a seed.
4. Oxygen - All three are nutrients while oxygen is a gas.

E. **State true or false:**

1. False - The green colour of the leaf is due to the presence of chlorophyll.
2. True
3. False - Cactus plant stores food in its stem.
4. False - Plants depend on animals for carbon dioxide for photosynthesis.

Practice Test-2 (Pg. No. - 38)

A. 1. (c) on underside 2 .(b) Iodine 3. (c)Stem
3. (b) glucose and oxygen

Short Answer Type Questions:

Q1 . What makes the plants appear green?

Ans. The presence of a green coloured pigment called chlorophyll makes the plant appear green in colour.

Q2. What is photosynthesis?

Ans. The process by which green plants make their own food using carbon dioxide and water in the presence of sunlight and chlorophyll is called photosynthesis.

Q3. Give two examples of food stored in seeds of the plant.

Ans. Coffee and Rajma are two examples of food stored in seeds of the plant.

Q4. What kind of plant is dodder ?

Ans. Dodder is an uncommon plant, as it grows on other plants.

Q5. What will happen to a plant if all its green leaves are plucked away?

Ans. Leaf is the kitchen of the plant .The plant will not be able to prepare its food if all its green leaves are plucked away.

Q6. Name two examples of stored food in each of the following:

Ans. Roots : Beetroot, sweet potato
Stems : Potato, Ginger
Leaves : Coriander, Mint

Q7. How are plants and animals interdependent?

Ans. Plant depend on animals for seed dispersal and carbon-dioxide. Animals depend on plants for food, shelter and oxygen.

Q8. What is the function of stomata in plants?

Ans. Stomata helps the plant in breathing and transpiration.

Q9. How does a cactus plant make food when all its leaves have changed into spines?

Ans. In cactus stem changes into fleshy, green, leaf life structure. It contains stomata and chlorophyll to perform photosynthesis.

Long Answer Type Questions:

Q1. How are cactus plants different from other plants?

Ans. Cactus plant is different from other plants in the following ways:

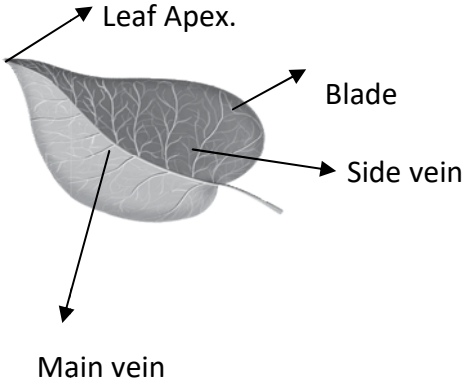
1. It grows in deserts.
2. Due to scarcity of water, the stem of cactus plant changes into fleshy, green, leaf-like structure.
3. Its leaves change into spines to reduce transpiration.

Q2. Write three functions of a leaf.

Ans. Functions of leaves are:

1. Leaves have stomata that help in exchange of gases.
2. Leaves prepare food for the plants.
3. Leaf gets modified into spines to reduce excessive transpiration.

Activity - Draw a well-labelled diagram of a leaf.



L - 6 : ADAPTATIONS IN ANIMALS

Quick Check (Pg.No. - 73)

State true or false:

1. False - Herbivores have strong molars that grind food.
2. False - Camouflage helps the animal to protect themselves from predators.
3. True
4. True
5. True

Test Match (Pg. No. : 76 – 77)
Practice Test – 1

A. **Tick the correct answer:**

1. (a) nocturnal 2.(b) desert 3.(a) land 4. (d) blubber

B. **Fill in the blanks:**

1. skin 2. aestivation 3. camouflage 4. ectoparasite

C. **Match the columns:**

1. Scavenger – Hyena 2. Camouflage – Stick insect
3. Invertebrate – Spider 4. Warm-blooded animal – Dog
5. Endoparasite – Tapeworm 6. Spiny animal – Hedgehog

D. **Circle the odd one out:**

1. Bear - All three animals are herbivores while bear is omnivore.
2. Tapeworm - All three are ectoparasites while tapeworm is endoparasite.
3. Camel - All three animals live in cold areas where camel is a desert animal.
4. Lizard - All three are mammals while lizard is a reptile.

E. **State true or false:**

1. True
2. True
3. False – Fish have fins to swim.
4. False – Omnivores eat both flesh and plants.

Practice Test - 2 (Pg. No. 77 – 78)

A. Tick the correct answer:

1. (c) birds 2. (d) thick skin 3.(b) hibernation
4. (c) they have blubber under their skin

Short Answer Type Questions:

Q1. What is adaptation?

Ans. The process by which animals get adjusted in their natural surroundings is called adaptation.

Q2. Name two animals that undergo hibernation.

Ans. Snake and lizard are two animals that undergo hibernation.

Q3. What is camouflage?

Ans. Camouflage is the feature by which animals blend with their surroundings easily that helps to protect them from predators.

Q4. Name two scavengers.

Ans. Hyena and vulture are scavengers.

Q5. Define aestivation. Give an example.

Ans. Aestivation is the inactive state of some animals to survive in extreme summer. It is also called summer sleep. e.g. snake and lizard

Q6. Name two arboreal animals. Write two adaptive features of arboreal animals.

Ans. Chameleon and monkey are the arboreal animals. Two adapted features of arboreal animals are :

(i) They have strong and sharp claws which help them to climb the branches.

(ii) They use tail to grip the branches and to swing between them.

Q7. What are warm-blooded animals and cold blooded animals? Give two examples of each.

Ans. **Warm-blooded animals:** The animals that can maintain a normal body temperature are called warm blooded animals. e.g. Birds and mammals.

Cold-blooded Animals: Animals that cannot maintain a normal body temperature are cold blooded animals. e. g. Fish and reptiles.

Q8. What is the difference between ectoparasites and endoparasites?

Ans.

ECTOPARASITES	ENDOPARASITES
1. Animals that live on the host's body to get their food are called ectoparasites.	1. Animals that live inside the host's body are called endoparasites.
2. e.g. Flea, lice and mosquitoes	2. e.g. roundworms, hookworms, and tapeworms

Q9. Why are frogs called amphibians? Explain.

Ans. Frogs are called amphibians because they can live both on land and in water.

Q10. If you bring a polar bear to Delhi, will it survive? Give reason.
Ans. No, it will not survive because its body is adapted to the cold climate.

Long Answer Type Questions:

Q1. Write adaptations seen in each of the following animals:
a) Polar bear b) Camel c) Monkey

Ans. a) Polar bear:

1. It has thick layer of fur and blubber that keeps the body warm.
2. It has thick padded feet to walk on snow easily.

b) Camel:

1. It has a thick skin which protects it from heat of the sun.
2. It has long legs and padded feet to walk on hot sand.

c) Monkey:

1. It has strong and sharp claws to climb branches.
2. It has a tail to grip the branches and to swing between them.

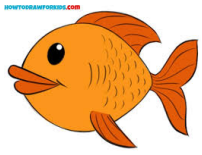
Q2. How are animals classified according to their food habits? Give example of each.
Ans. Animals are classified into following categories on the basis of their food habits:

1. **Herbivores :** Animals those eat only plants are called herbivores. e.g. cow, deer, rabbit, etc.
2. **Carnivores :** Animals those eat only flesh of other animals are called carnivores. e.g. tiger, lion, etc.
3. **Omnivores :** Animal those eat both plants and flesh of other animals are called omnivores. e.g. bear, cow, human, etc.

Q3. Explain some adaptive features by which animals protect themselves from enemies.
Ans. Adaptive features that help animals to protect themselves are:

1. Strong legs help animals to run very fast if they are in danger. e.g. deer and camel
2. Camouflage helps animals easily blend with their surroundings to protect themselves from predators.
3. Spines protect animals from predators like in hedgehog and porcupine.
4. Snails and tortoise have hard shells which protect them from their enemies.
5. Elephant and camel have large body size which scares away small animal.

Activity : Draw and label vertebrate and an invertebrate (one each).



Fish (Vertebrate)

Butterfly (Invertebrate)

L – 9 : MATTER

Quick Check (Pg. No. - 113)

A. Tick the correct answer:

1. c) CNG 2. a) solid 3. c) evaporation

Test Match (Pg. No. 116 – 117)

Practice Test - 1 :

A. Tick the correct answer:

1. (d) condensation 2.(a) Oxygen 3.(c) space 4. (d) all of these

B. Fill in the blanks:

1. Matter 2. solute 3.solid, liquid, gas 4. shape

C. Match the columns:

1. Solid to liquid – Melting
2. Gas to liquid – Condensation
3. Liquid to gas – Evaporation
4. Solid to gas – Sublimation

D. Circle the odd one out:

1. Solute - All three are the conversion processes where as solute is a substance.
2. Melting - All three are substances while it is process.
3. Water - All three are solutions while water is a solvent.
4. Oxygen - All three are liquids whereas oxygen is a gas.

E. State true or false:

1. True
2. True
3. False - Molecules of liquids are loosely packed.
4. False - Water changes to ice on cooling.

Practice Test - 2 (Pg. No. - 118)

A. Tick the correct answer:

1. (d) all of these 2.(b) solvent 3.(b) condensation
4. (b) water is the solvent

Short Answer Type Questions :

Q1. What is matter?

Ans. Matter is anything that occupies space and has weight

Q2. Do gases have weight?

Ans. Yes, gases have weight.

Q3. Define sublimation.

Ans. Sublimation is the process by which solid changes into gas directly.

Q4. What is the solvent in a lemonade?

Ans. Water is the solvent in a lemonade.

Q5. Name the three states of matter. Give an example of each.

Ans. The three states of matter are:

Solid - Tables and chairs
Liquid - Water and juice
Gas - Oxygen, and carbon-dioxide

Q6. What is condensation? Give an example.

Ans. Condensation is a process by which gas changes into liquid. It can be seen, if you place a glass of chilled water on the table for some time. On cooling, the gas changes into liquid (droplets).

Q7. Why is liquid stored in a container?

Ans. Liquids have definite volume, but no definite shape. They can flow so they need to be stored in a container.

Q8. How is solute different from solvent?

Ans. Solute is a substance that dissolves in liquid where as solvent is a substance which dissolve a solute in it.

Q9. Air is mixture of gases. How?

Ans. Air is a mixture because various gases like oxygen, carbon dioxide, nitrogen and water vapour are present in it.

Q10. When solid changes to liquid, what happens to the molecular arrangement?

Ans. When solid changes to liquid, the tight molecular arrangement of solid changes to loose arrangement. Hence liquids have spaces among the molecules and they move easily.

Q11. Why is it difficult to dissolve sugar in a cold water?

Ans. It is difficult to dissolve sugar in cold water because the space between the molecules in cold water is less than in warm water.

Q12. Sometimes during winter, water pipelines burst. Why?

Ans. In winter the temperature is low. The water freezes in the pipelines. The water expands on freezing but the pipeline does not and so the pipelines burst during winters.

Long Answer Type Questions:

Q1. Write four properties of gases.

Ans. Properties of gases are:

1. Gases have no definite shape.
2. They have no definite volume.
3. Molecules of gases are far apart.
4. Gases can be compressed easily**.**

Q2. When sugar is dissolved in water, the volume of the solution does not change. Why?

Ans. Water is a liquid. Liquids have definite volume. The molecules of water (liquid) are loosely packed. When the sugar dissolves in water, the molecules of sugar can easily fit into the space between the water molecules. So, the volume of the solution does not change.

Activity : Draw and label three states of matter.

L - 11 : WEATHER, AIR AND WATER

Quick Check (Pg. No. - 142)

A. State true or false:

1. True
2. False - Cool air is heavier than the warm air.
3. True
4. True

Test Match : (Pg. No. 145 – 146)

Practice Test - 1

A. Tick the correct answer:

1. (c) seasons 2. (b) night 3. (d) all of these 4. (d) Fog

B. Fill in the blanks:

1. from day to day 2. breeze 3.day and night 4. Chlorine tablets

C. Match the columns:

1. Evaporation – Water to water vapour
2. Condensation – Water vapour to water droplets
3. Precipitation – Water falls on the earth
4. Freezing – Water vapour to snow

D. Circle the odd one out:

1. Fog - All three are seasons while fog is form of precipitation.
2. High humidity - All three supports evaporation while it does not.
3. Chlorination - All three are methods to separate impurities while it kills germs.
4. Dew - All three are crystals while it is a water form.

E. State true or false:

1. True
2. True
3. False – Hail is a form of precipitation while gale is strong wind.
4. False – By decantation, mixture of muddy water can be separated.

Practice Test - 2 (Pg. No. : 146 - 147)

A. Tick the correct answer:

1. (c) sedimentation 2. (d) both (a) and (b) 3. (d) frost 4. (a) dry

Short Answer Type Questions :

Q1. Define the following : a) Humidity b) Weather

Ans.

a) **Humidity** : Humidity is the moisture present in the air in the form of water vapour.

b) **Weather :** Weather is the state of atmospheric condition of any place at a particular time **.**

Q2. What determines the weather conditions?

Ans. Sunlight, temperature, wind, humidity, clouds and rain determine the weather conditions.

Q3. Why does hot air rise up?

Ans. The hot air becomes lighter than cold air and it rises up.

Q4. Name three impurities of water.

Ans. Soluble impurities, insoluble impurities and disease-causing germs are three impurities of water.

Q5. What is water cycle?

Ans. Water cycle is the process of recycling of water in nature. In nature, the cycle of evaporation, condensation and precipitation takes place continuously.

Q6. How air currents sets in? Elaborate.

Ans. In nature, the air currents are set up when the hot air rises up and the cold air takes its place.

Q7. What is the difference between dew and frost?

Ans.

Dew	Frost
1. Water vapour condenses in air and forms water droplets that is called dew.	1. The water on the surfaces freeze into tiny white crystals. This is frost.
2. This can be seen on winter mornings.	2. This can be seen in very cold places.

Q8. What is the difference between land breeze and sea breeze?

Ans.

Land breeze	Sea breeze
1. The breeze which flows from land to the sea is called land breeze.	1. The breeze which blows from sea to the land is called sea breeze.
2. It blows during the night.	2. It blows during the day.

Q9. What is evaporation? When is it faster?

Ans. Evaporation is the process by which water changes into water vapour due to the sun's heat. It is faster when the weather is windy, the air is hot and dry.

Q10. Why do we feel sticky during rainy season?

Ans. **W**e feel sticky during rainy season due to humidity.

LONG ANSWER TYPE QUESTIONS:

Q1. Give two example of condensation.

Ans.

1. When you fill a glass with chilled fruit juice. After some time, the vapour changes into water droplets on the wall of the glass.

2. Water vapour in the atmosphere forms water droplets on coming in contact with cold air. These form the clouds.

Q2. Explain any three methods of purification of water.

Ans. Three methods of purification of water are:

1. Filtration : It is process of separating insoluble impurities from water by passing through a filter.
2. Boiling : It is easiest method of purification. The high heat kills the germs present in the water.
3. Chlorination : In this, chlorine tablets are added to kill the germs present in water.

Activity : Draw a diagram to show water cycle in the nature.