Chapter - 1    Nutrition is plants
Chapter - 2    Nutrition in animals
Chapter - 3    Fibre to fabric
Chapter - 4    Heat
Chapter - 5    Acids, Bases and salts
Chapter - 6    Physical & Chemical Changes
Chapter - 7    Weather, Climate and Adaptations of Animals.
Lesson - 1
Nutrition in Plants

Q.1 Match the following :-

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column II</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Plants</td>
<td>i) Saprotrophs</td>
<td>a</td>
</tr>
<tr>
<td>b) Animals</td>
<td>ii) Autotrophs</td>
<td>b</td>
</tr>
<tr>
<td>c) Pitcher Plant</td>
<td>iii) Heterotrophs</td>
<td>c</td>
</tr>
<tr>
<td>d) Fungi</td>
<td>iv) Insectivorous Plant</td>
<td>d</td>
</tr>
<tr>
<td>e) Lichens</td>
<td>v) Symbiotic relationship</td>
<td>e</td>
</tr>
<tr>
<td>f) Cuscuta (Amarbel)</td>
<td>vi) Parasitic Plants</td>
<td>f</td>
</tr>
</tbody>
</table>

Q.2 Neatly label the following diagram.

Diagram showing photosynthesis

Q.3 Label the following diagram of stomata.
Q.4 Fill in the blanks

Leguminous Plants: i.e., P-

Rh-......m bacteria

Sym-...... relationship

Q.5 Complete the following equation representing photo oyntheris.

\[
\begin{align*}
\text{Sunlight} & \quad \text{CO}_2 + \text{H}_2\text{O} \quad \text{Car......hy ........} \quad + \quad \text{ox....g......} \\
\text{Carbon dioxide} & \quad \text{Water} \quad \text{Ch......ph.....}
\end{align*}
\]
Worksheet -2
L-2
Nutrition in Animals

Q.1 Fill in the blanks.
   i) The conversion of complex food is called ________________
   ii) A ____________ is an association of symbiotic relationship between an alga and a fungus.
   iii) A plant that has both autotrophic as well as heterotrophic mode of nutrition is ____________.
   iv) The mode of taking in food by organism and its utilization by the body for its various activities is called _____________.
   v) The relationship in which two different organisms live together in such a way that benefit each other in some way is called the _________________.

Q2. Correct the following sentences by correcting the highlighted words:
   i) Roots are the main site of photosynthesis in plants.
      Ans. ______________________________________________________________
   ii) Boiled and cooled water with a pinch of salt and some sugar which is given to the patient suffering from diarrhea is called iodine solution.
      Ans. ______________________________________________________________
   iii) False feet in amoeba are called vacuoles.
      Ans. ______________________________________________________________
   iv) Cellulose is digested by ruminants in rumen.
      Ans. ______________________________________________________________
   v) Green pigment present in leaves is rhizobium.
      Ans. ______________________________________________________________

Note :- Under lined words should be highlighted.

Q.3 Match the items in Column I with Column II:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Liver</td>
<td>i) Acid release</td>
</tr>
<tr>
<td>b) Salivary gland</td>
<td>ii) Storage of undigested food</td>
</tr>
</tbody>
</table>
c) Small intestine  iii) Bile secretion  
d) Large intestine iv) Complete digestion  
e) Rectum v) Absorption of water 
f) Stomach vi) Release of faeces

Answer:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td></td>
</tr>
<tr>
<td>f</td>
<td></td>
</tr>
</tbody>
</table>

Q.4. Complete the table:

<table>
<thead>
<tr>
<th>Animal</th>
<th>Kind of Food</th>
<th>Mode of Feeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eagle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butterfly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mosquito</td>
<td></td>
<td></td>
</tr>
<tr>
<td>House Fly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>House Fly</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Help boxes:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>Siphoning</td>
</tr>
<tr>
<td>Sweet</td>
<td>Chewing</td>
</tr>
<tr>
<td>Flesh</td>
<td>Capturing</td>
</tr>
<tr>
<td>Nectar</td>
<td>Sucking</td>
</tr>
<tr>
<td>Blood</td>
<td>Sucking</td>
</tr>
<tr>
<td>Waste food</td>
<td>Siphoning</td>
</tr>
</tbody>
</table>

Q.5 Label the following diagrams:
## (a)

**Answers:**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
</table>

**Help Box:**

<table>
<thead>
<tr>
<th>Buccal Cavity</th>
<th>Oesophagus</th>
<th>Large Intestine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Intestine</td>
<td>Liver</td>
<td>Stomach</td>
</tr>
<tr>
<td>Pancreas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## (b)

**Answers:**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
</table>
Help Box:

<table>
<thead>
<tr>
<th>Bitter</th>
<th>Sour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet</td>
<td>Salty</td>
</tr>
</tbody>
</table>

c)

Answer:

- A
- B
- C

Help Box:

- Food Vacuole
- Nucleus
- Pseudopodia
L-3
Fibre to Fabric

Q.1 Cut & paste or draw & colour any four wool yielding animals.

1

2

3

4

Q.2 Given below is a cross word puzzle based on this lesson. Use hints to fill in the blank spaces with letters that complete the words.

(D) (A)

1) Removal of fluce of a sheep i) Separation of hair of different textures

2) Thorough washing of sheep’s ii) Covering of a pupa Hair

3) Rearing of silk worms. iii) Its leaves are eaten by silk worms.
Q.3. You must be familiar with the following rhyme remember and recite this in front of your class.

“Baa baa black sheep, have you any wool”

Q.4 Cut & paste a small piece of -

- A Silk Cloth
- A Cotton Cloth
- A Wollen Cloth

Q.5 Lifecycle of silk moth

(Colour all these diagram with your favourite colours.)

LIFE CYCLE OF SILK MOTH
Q.1 Using the symbol to segregate hot and cold objects:

<table>
<thead>
<tr>
<th>Object</th>
<th>Hot</th>
<th>Cold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice cream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burning Candle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q.2 State whether true or false:
1. The range of laboratory thermometer is from -10°C to 110°C.
   Ans: ______________________________________________________________
2. Temperature of our body can be measured by the help of clinical thermometer.
   Ans: ______________________________________________________________
3. The materials which allow heat to pass through them easily are known as conductors.
   Ans: ______________________________________________________________
4. We use iron utensils to cook food, because iron is a good conductor of heat.
   Ans: ______________________________________________________________
5. We use woolen and dark coloured clothes during winter.
   Ans: ______________________________________________________________

Q.3 Fill in the blanks:
1. The normal temperature of human body is ____________.
2. Two insulators of heat are ____________, ____________.
3. Two conductors of heat are ____________, ____________.
4. We use ____________ coloured clothes during summers.
5. We use woolen and ____________ coloured clothes during winter.

Q.4. Match the following:
<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Land breeze flows during</td>
<td>a. Summer</td>
</tr>
<tr>
<td>2. Sea breeze flows during</td>
<td>b. Winter</td>
</tr>
<tr>
<td>3. Dark coloured clothes are preferred during</td>
<td>c. Day</td>
</tr>
<tr>
<td>4. Light coloured clothes are preferred during</td>
<td>d. Night</td>
</tr>
</tbody>
</table>

**Answers:**

1. 
2. 
3. 
4. 

Q.5 Mark whether heat is transferred by conduction, convection or radiation:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

C

---
L-5
Acids, Bases and Salts

Q.1 Fill in the blanks.
   i) An acid tastes s_______________
   ii) A base tastes b__ tt____________
   iii) Litmus, a natural indicator is extracted from Li_______________.
   iv) An indicator used in a neutralisation reaction is phe____ph_____lein.
   v) Sugar is a n....u............l substance.

Q.2 Match the following.

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) An antacid</td>
<td>i) Formic acid</td>
</tr>
<tr>
<td>b) An Ant</td>
<td>ii) Milk of magnesia</td>
</tr>
<tr>
<td>c) China Rose</td>
<td>iii) Turns red litmus blue.</td>
</tr>
<tr>
<td>d) An acid</td>
<td>iv) A natural indicator</td>
</tr>
<tr>
<td>e) A base</td>
<td>v) Turns blue litmus red.</td>
</tr>
</tbody>
</table>

Answer:

<table>
<thead>
<tr>
<th>a.</th>
<th>b.</th>
<th>c.</th>
<th>d.</th>
<th>e.</th>
</tr>
</thead>
</table>

Q.3 Bring a soil sample of your area, find out weather it is acidic, basic or neutral with the help of red or blue litmus solution/paper. Write this observation in the space given below.
Q.4  According to their nature give proper place to each substance given below.

Curd, Common Salt, Vinegar, Soap, Sugar, Lime water, Lemon Juice, Window Cleaner.

1. Acidic Nature

2. Basic Nature

3. Neutral Substances

Q.5  Complete the following table

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Substance</th>
<th>Litmus used</th>
<th>Colourchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex.</td>
<td>Curd</td>
<td>Red</td>
<td>No change</td>
</tr>
<tr>
<td>2.</td>
<td>Salt</td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Lime water</td>
<td>Red</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Lemon Juice</td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Window Cleaner</td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Sugar</td>
<td>Red</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Vinegar</td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Baking soda</td>
<td>Blue</td>
<td></td>
</tr>
</tbody>
</table>
L-6
Physical And Chemical Changes

Q.1 Fill in the blanks:
1. Photosynthesis is a _____________ change.
2. The micro-organisms which convert the dead plants and animals to humus are known as _____________.
3. The freezing point is ____\(^\circ\)C at which water freezes.
4. Lactobacillus bacterium helps in the formation of _____________.
5. Galvanization is the process of coating iron objects with the layer of _______ metal.

Q.2 Correct the following sentences by replacing the highlighted words:
1. Change in the physical properties of a substance is termed as chemical change.
   Ans. ______________________________________________________________
2. Boiling is the process in which water turns to ice when cold enough (below 0\(^\circ\)C temperature.)
   Ans. ______________________________________________________________
3. Formation of new substances by change in one or more substances is called physical change.
   Ans. ______________________________________________________________
4. The process of deposition of brownish layer on iron when it is exposed to air and water is called polishing.
   Ans. ______________________________________________________________
5. Melting is the process of formation of solid crystals from solution.
   Ans. ______________________________________________________________

Q.3. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Iron (Fe) + Oxygen (O(_2), from air) + water (H(_2)O)</td>
<td>a. Baking Soda</td>
</tr>
</tbody>
</table>
Q.4 Answer the multiple choice questions :
1. Properties which are affected during physical change :
   a. Colour
   b. Shape
   c. Size
   d. All of the above
2. Which of the following is not an example of crystallization :
   a. Salt obtained from sea water
   b. Snow flakes formation
   c. Crystallization of sugar from sugar syrup.
   d. Rusting of iron.
3. Example of chemical change is :
   a. Dissolving sugar in water
   b. Formation of clouds
   c. Cooking of food
   d. Cutting of trees
4. Which of the following can accompany a chemical change :
   a. Heat
   b. Sound
   c. Gas
   d. All of the above
5. Which of the following is an alloy :
   a. Copper
   b. Steel
   c. Zinc
   d. Aluminium
Q.1 Choose and tick the correct option

Options

a) Feeling very hot
   i) Temperature below 20°C or
      Temperature above 40°C

b) Sweating too much
   ii) Humid weather or Dry weather

c) Very pleasant weather
   iii) Temperature above 40°C or
      Temperature about 20°C

d) Too cold
   iv) Temperature less than 5°C or
      Temperature more than 15°C

e) Early morning temperature
   v) Maximum temperature or
      Minimum temperature of a day

Q.2 Recognize the animals given below and write any two adaptive features of each in the given spaces.

A) Name of the animal
   P___g__in

   Two adaptive features

   1. _____________________________________________________________
   2. _____________________________________________________________

B) Name of the animal
   P_____ B_______

   Two adaptive features
Q.3. Measure the today’s temperature with the help of laboratory thermometer and write it in the given box.

Date: ____/ ____ / 2012
Temperature: _______ °C

Q.4 Collect and paste weather reports of any two successive days and complete the given table.

<table>
<thead>
<tr>
<th>Weather report I</th>
<th>Weather Report II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Maximum Temperature</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q.5 Explore internet and find two beautiful pictures of any two migratory birds and paste them in the given spaces.

(A)  
(B)
Medium - English
Session 2012-13
Class-VII
Subject - Science
WORK-SHEET
S.A. 2

Chapter - 8 Winds, Stroms and cyclones
Chapter - 9 Soil
Chapter - 10 Respiration in organisms
Chapter - 11 Transportation in Animals and Plants
Chapter - 12 Reproduction in Plants
Chapter - 13 Motion and Time
Chapter - 14 Electric Current and its Effects
Chapter - 15 Light
Chapter - 16 Water - A Precious Resource
Chapter - 17 Forests : Our Lifeline
Chapter - 18 Waste water story

Under the Guidance of
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GGSS, Avantika,Sec-1, Rohini
ID : 1413069
L-8
“Winds, Storms & Cyclones”

Q.1 Fill in the blanks:
1) Moving air is called _________________.
2) The centre of the cyclone is the calm area which is called the ____________ of the storm.
3) ____________ is a dark funnel shaped cloud that reaches the ground from the sky.
4) The word monsoon is derived from the arabic word mans am which means _____________.
5) The instrument that measures the wind speed is called _________________.

Q.2 Correct the following statements by replacing the highlighted word.
1) Warm air is heavier than the cold air.
Ans. ______________________________________________________________
2) The pressure of the air decreases if the speed of the wind is decreased.
Ans. ______________________________________________________________
3) Cyclones are constructive because they can damage houses, telephones and other communication systems, agriculture, trees etc.
Ans. ______________________________________________________________
4) The even heating of the earth surface is the main cause of wind movement.
Ans. ______________________________________________________________
5) The overfilled bicycle tube bursts because the pressure inside it becomes less than the atmospheric pressure outside.
Ans. ______________________________________________________________

Q.3 Match the following:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cyclone</td>
<td>a. America Continent</td>
</tr>
<tr>
<td>2. Typhoon</td>
<td>b. North America</td>
</tr>
<tr>
<td>3. Hurricane</td>
<td>c. Indian Subcontinent</td>
</tr>
</tbody>
</table>
Q.4 Using the symbol ( ), select four precautions you should follow when you are hit by a cyclone:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Precautions</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Do not touch power lines which are fallen or switches which are wet.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Use umbrellas.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Don’t go out for the sake of fun.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Don’t make undue demands and pressurize the rescue forces.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Lie down on the ground.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Cooperate and help your neighbours.</td>
<td></td>
</tr>
</tbody>
</table>

Q.5 Answer the multiple choice questions:

1. Which state was hit by two deadly cyclones in October 1999.
   a. Orissa
   b. Andhra Pradesh
   c. West Bangal
   d. Andaman & Nicobar Islands

2. Cyclones affect:
   a. Agriculture
   b. Transport
   c. Communication & Electricity
   d. All of the above

3. Factors that effect formation of cyclones:
   a. Wind speed
   b. Wind direction
   c. Humidity & Temperature
   d. All of the above
L-9
“Soil”

Q.1 Fill in the blanks.
   a) Soil with greater proportion of big pasticles.- S_____S____l
   b) Soil with greater proportion of fine porticles.- C_____y_____s____l
   c) Soil with highest percolation rate - ____a__d__s____l
   d) Soil with almost equal amount of large and fine particles. - L_____m__S_____l
   e) Soil with highest water holding capacity - C______y s____l

Q.2 Label and colour the following diagram.

[Diagram of soil layers with labels H, W, l, S, G]

Layers of Soil

Q.3. Calculate the rate of percolation.
   for a certain sample, it tooks 25 minutes for 300 ml to percolate.

   Formula -- Rate of percolation = \( \frac{\text{Amount of water}}{\text{Percolation time}} \)

   Precalation rate or rate of percolation -- \( \frac{\text{Amount of water}}{\text{Percolation time}} \)

   = \( \frac{300 \text{ ml}}{25 \text{ min}} \)

   = \( \frac{12 \text{ ml}}{1 \text{ min}} \)
Q.4 In the picture given below, a potter is making pots by using a special type of soil can you name it?

------------- Soil

Q.5 Collect samples of all three types of soil in small polythene bags and staple them in the given spaces.

Loamy Soil

Clayey soil
Q.1 Fill in the blanks:
1. The process of breaking down of food in the cell with the release of energy is called _______________ respiration. (Cellular / Anaerobic)
2. The taking in of air rich in oxygen into the body is called _______________. (Inhalation / Exhalation).
3. The openings in a cockroach’s body through which it takes in air in its body for respiration are called ________________. (Nostrils / Spiracles)
4. The large muscular sheet which forms the floor of the chest cavity is called _______________. (Diaphragm / Lungs).
5. The number of times a person breathes in a minute is termed as the _______________ rate. (Breathing / Running)

Q.2 Correct the following statements by replacing the highlighted word:
1. Lungs are located in the buccal cavity : (Chest / Nasal)
   Ans. ____________________________
2. The type of respiration in which food is broken down without the use of oxygen is called aerobic respiration. (Cellular / Anaerobic)
   Ans. ____________________________
3. Humans are anaerobes. (Yeast / Dogs)
   Ans. ____________________________
4. Yeast respires anaerobically and yields water. (Fruit Juice / Alcohol)
   Ans. ____________________________
5. When we feel drowsy, our breathing rate increases. (Remains same / Slows Down)
   Ans. ____________________________
Q.3. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Glucose (with oxygen)</td>
<td>a. 21% Oxygen, 0.04% Carbon Dioxide</td>
</tr>
<tr>
<td>2. Glucose (Without Oxygen)</td>
<td>b. 16.4% Oxygen, 4.4% Carbon Dioxide</td>
</tr>
<tr>
<td>3. Glucose in muscles (In the absence of oxygen)</td>
<td>c. Carbon Dioxide + water + energy</td>
</tr>
<tr>
<td>4. Inhaled air</td>
<td>d. Carbon Dioxide + Alcohol + Energy</td>
</tr>
<tr>
<td>5. Exhaled air</td>
<td>e. Lactic acid + Energy</td>
</tr>
</tbody>
</table>

Answer:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>

Q.4 Complete the table:

<table>
<thead>
<tr>
<th>How do they breathe?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Earthworm</td>
</tr>
<tr>
<td>2. Cockroach</td>
</tr>
<tr>
<td>3. Frog</td>
</tr>
<tr>
<td>4. Leaves</td>
</tr>
<tr>
<td>5. Fish</td>
</tr>
<tr>
<td>6. Humans</td>
</tr>
</tbody>
</table>

Help Box

<table>
<thead>
<tr>
<th>Skin</th>
<th>Lungs, Skin</th>
<th>Stomata</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachea</td>
<td>Gills</td>
<td>Lungs</td>
</tr>
</tbody>
</table>
Q.1 We have given one component of blood, write other three in the given spaces.

Q.2 Match the following

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Its presence makes blood appear red.</td>
<td>i) Phloem</td>
</tr>
<tr>
<td>b) Fight against germs that may enter our body.</td>
<td>ii) Plate lets</td>
</tr>
<tr>
<td>c) Transport of food.</td>
<td>iii) Haemoglobin</td>
</tr>
<tr>
<td>d) Transport of water.</td>
<td>iv) White blood cells</td>
</tr>
<tr>
<td>e) Clotting of blood.</td>
<td>v) Xylem</td>
</tr>
</tbody>
</table>

Answer:

1.
2.
3.
4.
5.

Q.3. Record your own pulse rate per minute.

a) While resting -- ........................ / min
b) After running for 4-5 minutes - ........................ / min

Q.4 Correct the following sentences by replacing the highlighted words.

a) **Arteries** are the vessels which carry carbon dioxide rich blood from all parts of the body back to the heart.
b) **Veins** carry oxygen-rich blood from the heart to all parts of the body.

c) **Ammonia** is the main excretory product of human beings.

d) **Uric acid** is the main excretory product of fishes.

e) **Urea** is the main excretory product of birds, lizards etc.

**Q.5. Label the following Diagram (A)**

Sections of human heart.

**Label the following diagram (B)**

Human Excretory System
Observe the given diagram and name the process. (C)
Q.1 Fill in the blanks:
1) The production of new individuals from their parents is known as ___________.
2) The plant with both male and female reproductive parts is called a ___________ flower.
3) The transfer of pollen from the anther to the stigma of a flower is called ________.
4) _____________ are the reproductive parts of the plant.
5) Type of asexual reproduction in which new plants are produced from vegetative parts (roots, stems, leaves and buds) is called _______________ propagation.

Q.2 Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drumstick, Maple</td>
<td>a. Sori (spores)</td>
</tr>
<tr>
<td>2. Fern</td>
<td>b. Hairy Seeds</td>
</tr>
<tr>
<td>3. Bryophyllum</td>
<td>c. Spiny seeds</td>
</tr>
<tr>
<td>4. Ginger, Potato</td>
<td>d. Winged Seeds</td>
</tr>
<tr>
<td>5. Yeast</td>
<td>e. Stem cuttings</td>
</tr>
<tr>
<td>6. Rose</td>
<td>f. Budding</td>
</tr>
<tr>
<td>7. Xanthium, Urena</td>
<td>g. Eyes</td>
</tr>
<tr>
<td>8. Sunflower, Oak</td>
<td>h. Buds in the margin of leaves</td>
</tr>
</tbody>
</table>

Answer 1. 2. 3. 4. 5. 6. 7. 8.
Q.3 Write the correct word for the jumbled word.

Ans. 1) The part of the flower which makes the pollen ________________.
2) The part which makes eggs ________________.

Q.4 Identify the given mode of Asexual reproduction and write its name in the space provided:

[Diagrams of different modes of asexual reproduction]
L-13
Motion and Time

Q.1 Here are a few units of time. Arrange them in an ascending order
Second, day, year, month, minutes, hour
........... < ............ < ............... < ............... < ............ < ............

Q.2 Let us calculate your speed of walking.
Distance Travelled = ................. metres
Time taken = ................. sec.

Speed = \[ \frac{\text{Distance Travelled}}{\text{Time taken}} \]

Speed = \[ \frac{\ldots\ldots\ldots\ldots\ldots}{\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots} \] = ................. m/sec.

(Note - you can do this activity in your school’s corridor with the help of your friend)

Q.3 A simple pendulum takes 10s to complete 20 oscillations. What is the time period of the pendulum?

No. of oscillations = .................
Time taken = ................. sec.

Time period of the pendulum = \[ \frac{\text{Time taken}}{\text{No. of Oscillations}} \]

Time period of the pendulum = \[ \frac{\ldots\ldots\ldots\ldots\ldots}{\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots} \] = ................. s

Q.4 Match the following

```
<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) A car moving with a constant speed.</td>
<td></td>
</tr>
</tbody>
</table>
```
ii) A car parked on a side road

iii) A car moving with a speed changing

Answer:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
</table>

Q.4 a) Observe this bar graph showing runs scored by a team in each over and answer the following questions.

a) No. of runs scored in the 3rd over. 

b) No. of runs scored in the 6th over.

Q.5. Observe this line graph showing change in weight of a man with age.

a) Weight at the age of 10 yrs.

b) Weight at the age of 16 yrs.
L-14
Electric Current and its effects.

Q.1 Fill in the blanks:
a) The combination of two or more cells is called a _________________.
b) The coil of wire used in electric heaters is called an _________________.
c) A current carrying coil of an insulated wire wrapped around a piece of iron is called an _________________.
d) Magnetic effect of Electric current was discovered by a scientist named._______
e) When electric current flows through a wire, it gets heated which is termed as the ________________ effect of electric current.

Q.2 Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MCB</td>
<td>a. Nichrome</td>
</tr>
<tr>
<td>2. ISI mark</td>
<td>b. Miniature Circuit Breaker</td>
</tr>
<tr>
<td>3. CFL</td>
<td>c. Tungsten</td>
</tr>
<tr>
<td>4. Element</td>
<td>d. Compact Fluorescent Lamps</td>
</tr>
<tr>
<td>5. Filament</td>
<td>e. Bureau of Indian Standards</td>
</tr>
</tbody>
</table>

Answers : 1. 2. 3. 4. 5.

Q.3 Write the symbol for the following Electric components:

1. Electric Cell ........................................
2. Electric Bulb ........................................
3. Switch ‘ON’ ...........................................
4. Switch ‘Off’ .........................................
5. Battery ............................................... 
6. Wire ...................................................
Q.4. Observe and write whether Open Circuit or Closed Circuit:

1. 

Answer: ____________________

2. 

Answer: ____________________

3. 

Answer: ____________________
L-15
LIGHT

Q.1 Fill in the blanks
a) Light travels along a ......................... line.
b) An image that cannot be obtained on a screen is called a ....................... image.
c) The image formed by ..................... mirror is erect, virtual and is of the same size as the object.
d) An image which can be obtained on a screen is called a ....................... image.
e) A ................. lens can be used as a magnifying glass.

Q.2 Match the following

a) ![Image of a magnifying glass]
   i) A convex lens

b) ![Image of a plane mirror]
   ii) A Plane mirror

c) ![Image of a Newton’s Disc]
   iii) A Newton’s Disc

d) ![Image of a convex mirror]
   iv) A convex mirror

e) ![Image of a concave mirror]
   v) A concave mirror
Q.3  Recognize these mirrors and name them.
A)  
   i)  
   ii)  

B)  Recognize these lenses and name them.
   i)  
   ii)  

Q.4  Fill in the blanks.
a)  
A convex lens converges (Bends inwards) the light falling on it, therefore it is called a ...................................... lens.
   (Diverging lens or converging)

b)  
A concave lens diverges (Bends outwards) the light card it is called a ................................. Lens.
   (Diverging lens or converging lens)
Q.5 Here we have made a circle divided into seven segments for you. Paint or paste seven rainbow colours in these segments.

Q.6 Carefully observe and tick the right choice?

a) Images of a candle in a plane mirror

Real image / Virtual image

Image formed by a convex lens

Real image / Virtual image

Image formed by a concave mirror

Real image / virtual image.
Q.1 Fill in the blanks
1. 22 March is celebrated as the ‘World __________ day’.
2. _____% of the Earth’s surface is covered with Water.
3. ______________ was the traditional way of collecting water.
4. Water exists in three forms : (i)_________________, (ii) _____________ and (iii) _____________.
5. Water management is a practice to minimize ____________ of water.

Q.2 State whether True of False :
1. Infiltration is the process of seeping of water into the empty spaces of ground.
Ans. ______________
2. Collection and conservation of rainwater from the rooftop of buildings and industries is known as rainwater harvesting.
Ans. ______________
3. 30 March is celebrated as the World Water Day.
Ans. ______________
4. We can drink sea water because of its salt content.
Ans. ______________
5. The process of infiltration recharges the groundwater.
Ans. ______________

Q.3. Write some methods to conserve water at home :
Answer :
1. Moping floor instead of washing.
2. Washing vehicles using bucket.
3. ______________________________________________________________
4. ______________________________________________________________
5. ______________________________________________________________
6. ______________________________________________________________
7. ______________________________________________________________
Q.4 Match the given numbers with the processes given in the jumbled form:

1. loras_reengy
2. duclos
3. atooniaaervp
4. ntciepirtaipo
5. eas_terwa

Answers:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
<td></td>
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<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Q.1 Choose the correct option in the following questions.
i) Which of the following is not a forest product?
   a) Gum
   b) Ply wood
   c) Sealing wax
   d) Kerosene

ii) Micro organisms act upon the dead plants to produce.
   a) Sand
   b) Mushrooms
   c) Humus
   d) Wood

iii) If forests disappear
   a) The amount of carbon dioxide in air will decrease.
   b) The amount of oxygen in air will increase.
   c) The amount of carbon dioxide in air will increase.
   d) The amount of nitrogen in air will increase.

iv) The micro-organism which convert the dead plants and animals to humus are known as
   a) Herbivores
   b) Carnivores
   c) Decomposers
   d) Parasites

v) Which of the following animals is not a wild animal.
   i) Jackals
   ii) Elephant
   iii) Goat
   iv) Tiger

Q.2 List any five products we get from forests.
   i) ........................
   ii) ........................
   iii) ........................
   iv) ........................
   v) ........................

Q.3 Make a beautiful collage of forest in the given space and label it using the following labels.
   Clouds, rain, plants, animals, soil, routes, water table, carbon dioxide, oxygen.
Q.4 Fill in the blanks

![Diagram showing the importance of forests]

Q.5 After observing these pictures a & b some thoughts must be tickling in your mind, just write them in the given spaces.

A)
Q. 6. Write a slogan

Topic - Wild life conservation

(Note - With the help of your teacher, parents, elder brother or sister or internet or any other source write a slogan on the topic given above.)

Wild life conservation
Q.1 Fill in the blanks:
1. The impurities like lather, oil, urea, dirt etc. Which are dissolved and suspended in sewage are called ______________.
2. The set of pipes which take away sewage from our homes to the water treatment plants are called ________________.
3. __________ is wastewater released by homes, industries, hospitals etc.
4. __________ trees are planted all along sewage ponds.
5. Wastewater is treated in a __________ treatment plant.

Q.2 Complete the chart:

Water can be used as

```
Clean Water put to Use

Drinking
```

Q.3 Identify the following statements as “Do’s and Don’ts” for better housekeeping practice:
1. Cooking oil and fats should be thrown down the drain.
2. Chemicals like paints, solvents, insecticides, medicines, motor oil may kill microbes that help to purify water, so do not throw them down the drain.
3. Used tea leaves, solid food remains, soft toys, cotton, sanitary towels etc. should be thrown in the drains.
4. The untreated human excreta is a health hazard, thus toilets should be constructed to maintain personal hygiene.
5. Cleaning and wiping floors everyday is not necessary at all.

<table>
<thead>
<tr>
<th>Answers</th>
<th>Do’s</th>
<th>Don’ts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
L-18 A
Waste Water Story

Q.1 Here is a crossword puzzle: Good Luck!

```
W A S T E W A T E R P X
H U E V Y U S M Q J P D
J T W B J P E D K O K G
K E A H C H L O R I N E
K D G J P P A Q T U O J
U R E A O K S L U D G E
J A H K L L I F G U B M
C O N T A M I N A N T S
J Z G H N I D V Y J S E
O O V K G N F R P B F W
H N J Y R T W Q I U X E
X E U C A L Y P T U S R
```

CLUE --

1. Used water ______________.
2. Liquid waste products ______________.
3. Pipe carrying sewage ______________.
4. Absorbs Ultraviolet rays ________________.
5. Used to disinfect water ________________.
6. Solid waste extracted in sewage treatment ____________.
7. Waste matter discharged from human body ____________.
8. Suspended and dissolved impurities in water ______________.
9. Trees planted along sewage ponds ________________.

Q.2 Write one slogan on “Conservation of water”.

Ans. .................................................................