2nd Term Worksheet [2018 – 19]

Subject – Biology

Class – VII

Name : **Sec. :**

Chapter – 4
[Plant Life]

Check Point:

[A] Fill in the blanks: [71]

1. _____ is a green-coloured pigment present in the chloroplast of the leaf cell.
2. The stomata remain close when it is _____.
3. More light means more _____.
4. Photosynthesis occurs in _____ tissues.
5. Plant is kept in totally dark room to make it free from _____.

[B] Fill in the blanks: [73]

1. The process of respiration leads to production of _____, _____ and _____.
2. Aerobic respiration results in _____ ATP molecules while anaerobic respiration produces _____ ATP molecules.
3. Aerobic respiration takes places in the presence of _____.
4. The _____ air is directly carried to the cells, where the oxidation of food takes place.
5. _____ respiration leads to incomplete oxidation of food.

[C] Give one word for the following: [76]

1. Fine pores present on the surface of most of the leaves.

   _____

2. Tiny openings present on the mature roots and woody stems of some trees.

   _____

3. Process responsible for synthesis of food from carbon dioxide and water.

   _____

4. Process which is responsible for oxidation of food into carbon dioxide, water and release of energy.

   _____

Keywords: **[76]**

Aerobic respiration: _____

Anaerobic respiration: _____

Respiration: _____

_____

Lenticels: _____

_____

Stomata: _____

_____

Exercise: **[77-80]**

[A] Multiple Choice Questions: [77]

(i) In which of the following cell organelles does photosynthesis occur?

(a) Mitochondria (b) Chloroplast

(c) Chlorophyll (d) Golgi bodies

(ii) How many guard cells are present in a stoma?

(a) 4 (b) 3

(c) 2 (d) 5

(iii) Which sugar is produced during photosynthesis?

(a) Sucrose (b) Lactose

(c) Glucose (d) Fructose

(iv) Which of the following forms of carbohydrate is broken down during respiration?

(a) Fructose (b) Sucrose

(c) Glucose (d) Lactose

(v) Which of the following is a by-product of anaerobic respiration take place?

(a) Oxygen (b) Nitrogen

(c) Ethyl alcohol (d) None

(vi) In which pair of cell organelle does cellular respiration?

(a) Cytoplasm, endoplasmic reticulum (b) Mitochondria, chloroplast

(c) Mitochondria, cytoplasm (d) Endoplasmic reticulum, mitochondria

(vii) In plants, the lenticels are found on

(a) Woody stems, mature roots (b) Underside of the leaf

(c) On surface of young green stems (d) None of these

[B] Fill in the blanks: [77]

1. When light intensity decreases, rate of _____ decreases.
2. Concentration of _____ increases the rate of photosynthesis.
3. _____ element is involved in opening and closing of stomata.
4. $C_6H_{12}O_6$ + _____ $\rightarrow 6CO_2 + 6H_2O$ + Energy
5. _____ are tiny openings present on the mature roots and woody stems of some trees.

[C] Write T for true and F for false statements: [77]

1. Carbon dioxide and water are the by-products of photosynthesis. _____
2. The rate of photosynthesis is low at high temperature. _____
3. Aerobic respiration takes place in the absence of oxygen. _____
4. Incomplete oxidation of food takes place in anaerobic respiration. _____
5. Respiration occurs during day time and night. _____

[D] Give one word for the following: [78]

1. Green-coloured pigment present in the chloroplast of the leaf cell.

   _____

2. Process in which carbon dioxide enters the leaf and oxygen is released to the outer atmosphere.

   _____

3. Optimum temperature for photosynthesis.

   _____

4. Process of releasing energy by breaking down food for life activities.

   _____

5. Process of breathing in.

_____

6. Process of breathing out.

_____

7. Time during which stomata are open.

_____

8. Examples of fruits with lenticels on them.

_____

9. Structures found in the leaves through which carbon dioxide is released into the atmosphere.

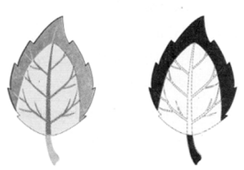
_____

10. Gas which turns limewater milky.

_____

[E] Look at the given images and answer the questions that follow: [78]

1.



a. What is the aim of the given activity?

Ans. _____

_____

_____

b. What does the green portion of the leaf indicate?

Ans. _____

_____

c. Why does the green portion of the leaf appear green?

Ans. _____

_____

_____

_____

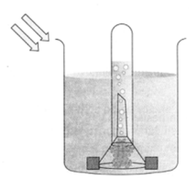
_____

_____

_____

_____

2.



a. Identify the activity for which the given below set-up is required.

Ans. _____

_____

_____

b. What is the aim of the given experiment?

Ans. _____

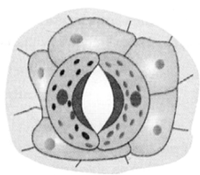
_____

_____

c. What does the bubbles emerging from the *Hydrilla* plant indicate?

Ans.

3.



a. What is the location of stomata?

Ans.

b. Identify guard cells and stomatal opening in the given image.

Ans.

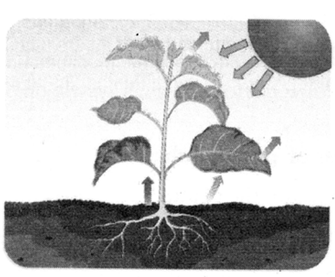
c. Name the gas that is taken in through the stomata.

Ans.

d. Explain the working of stomata.

Ans.

4.



a. Name the biochemical process being carried out.

Ans.

b. Which part of the plant carries out the process?

Ans. _____

c. Name the pigment present in green plants that help in carrying out the process?

Ans. _____

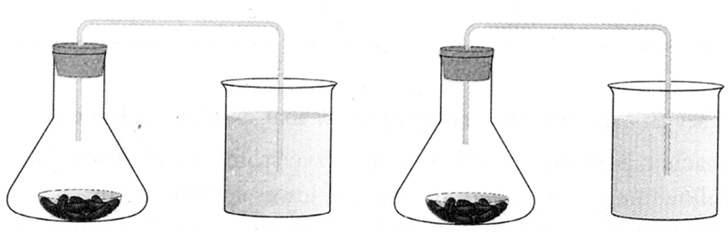
d. Name the plant cell organelle that stores the pigment.

Ans. _____

e. Enlist the reactants required to carry out process.

Ans. _____

5.



a. Mention the reason of experiment depicted in the below figure.

Ans. _____

b. What is the difference observed in the limewater in the set-up A and B? why?

Ans. _____

c. Name the gas evolved in Set-up B.

Ans. _____

d. State the conditions necessary for the seeds to germinate.

Ans. _____

e. What other liquid other than limewater can be used to qualify the test?

Ans. _____

[F] Very short answer type questions: [80]

1. What is photosynthesis?

Ans. _____

2. Where does the process of photosynthesis take place?

Ans. _____

3. What are the by-products of photosynthesis?

Ans. _____

4. List some factors that affect photosynthesis.

Ans. _____

5. What is stoma?

Ans. _____

6. What are by-products of aerobic respiration?

Ans. _____

7. What is the role of chlorophyll in photosynthesis?

Ans. _____

8. Which tissue helps in conduction of food and water in plants?

Ans. _____

9. Write the equation representing aerobic and anaerobic respiration.

Ans. _____

[G] Short answer type questions: [80]

1. What is the significance of photosynthesis?

Ans. _____

2. What is respiration? Name the two types of respiration.

Ans- _____

3. How can you prove that respiration and photosynthesis are opposite in terms of mechanism?

Ans-

[H] Long answer type questions: [80]

1. With the help of a chemical reaction, explain the process of photosynthesis.

Ans-

2. How will you test the presence of chlorophyll in the leaves of the plant?

Ans-

3. Explain the working of stomata with a suitable diagram.

Ans-

4. Describe the transportation of food and water in plants.

Ans-

[I] Differentiate between the following: [80]

1. Aerobic respiration and anaerobic respiration

2. Respiration and breathing

3. Photosynthesis and respiration

Chapter – 5
[Excretory System]

Check Point:

[A] Fill in the blanks: [90]

1. _____ is an example of nitrogenous waste.
2. _____ converts the toxic ammonia produced by the body cells into less toxic urea.
3. In the vertical section, the kidney shows an inner lighter zone called _____.
4. _____ is expelled out of the body by lungs through the nostrils.
5. _____ is a machine that can be used for a person with none of the kidneys functioning properly.

Keywords: **[90]**

ARF: _____

_____

Excretion: _____

End stage renal disease: _____

_____

Hilus: _____

Kidney: _____

_____

_____

UTI: _____

_____

Exercise: **[91-94]**

[A] Multiple Choice Questions: [91]

(i) Which of the following may cause UTI?

(a) E.coli (b) Chlamydia

(c) Mycoplasma (d) All of these

(ii) Which of the following is an example of nitrogenous waste products?

(a) Ammonia (b) Urea

(c) Uric Acid (d) All of these

(iii) Which of the following is not an excretory organ?

(a) Kidneys (b) Skin

(c) Uterus (d) Urethra

(iv) Which of the following is not an accessory excretory organ in man?

(a) Liver (b) Urethra

(c) Lenticels (d) Kidney

(v) Which of the following is a chief excretory organ?

(a) Ureter (b) Urinary bladder

(c) Urethra (d) Kidney

(vi) During the secretion stage, which substance is secreted into the filtrate in exchange of reabsorbed sodium?

(a) Urea (b) Potassium

(c) Calcium (d) Phosphorous

(vii) Kidney stone refers to a solid deposit that occurs in the following system.

(a) Urinary (b) Digestive

(c) Reproductive (d) Respiratory

[B] Fill in the blanks: [92]

1. Kidneys are enclosed in transparent membrane called _____.
2. A circular _____ muscle guards the opening of the bladder into the urethra.
3. _____ is the basic functional unit of the kidney.
4. The Bowman's capsule and glomerulus together form _____ body.
5. Yellow colour of urine is due the pressure of the pigment _____.

[C] Give one word for the following: [92]

1. Process of removing waste form the body

_____

2. The structure present in kidney that act as filters

_____

3. A transparent membrane enclosing each kidney

_____

4. The glands present in skin.

_____

5. A solid deposit that forms in the urinary system.

_____

[D] Write True or False for the following sentences: [92]

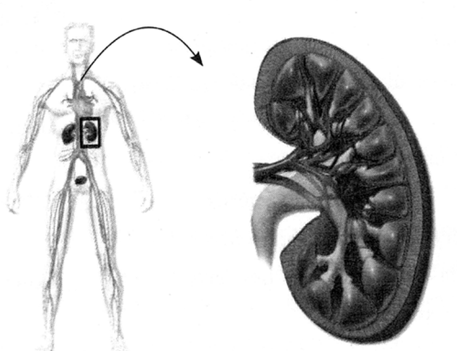
1. Oxygen is expelled out of the body through lungs. _____
2. Formation of urine takes place in the kidney in three stages. _____
3. The most common treatment for urinary tract infections is antibiotics. _____
4. The solid deposits that occur in the urinary system are called bladder stones.

_____

5. An artificial kidney is called dialyser. _____

[E] Observe the diagrams given below and answer the questions that follow: [92]

1.



a. Identify which organ is this?

Ans. _____

_____

b. What is its function in the human body?

Ans. _____

_____

_____

_____

_____

c. Draw the diagram and label the following parts:

i. Cortex

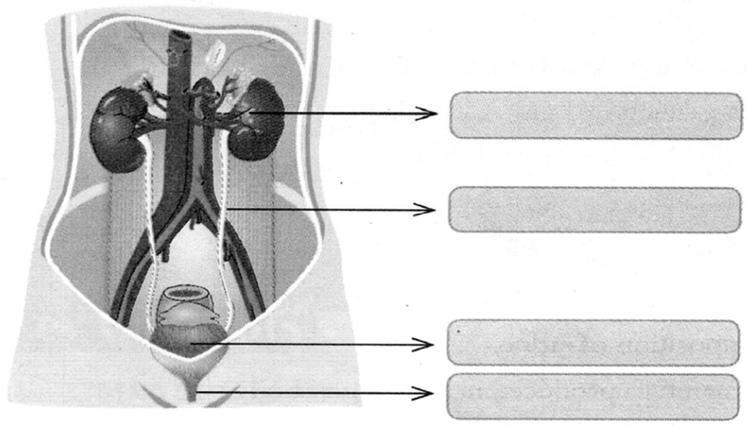
ii. Medulla

iii. Renal artery

iv. Renal vein

v. Ureter

2.



a. Label the parts.

b. Which system is being observed in the above figure?

Ans. _____

_____

_____

_____

c. State its importance.

Ans. _____

_____

_____

_____

_____

_____

d. Rahul doesn't drink water regularly. Which part of the excretory system will be affected? Suggest a remedy.

Ans. _____

_____

_____

_____

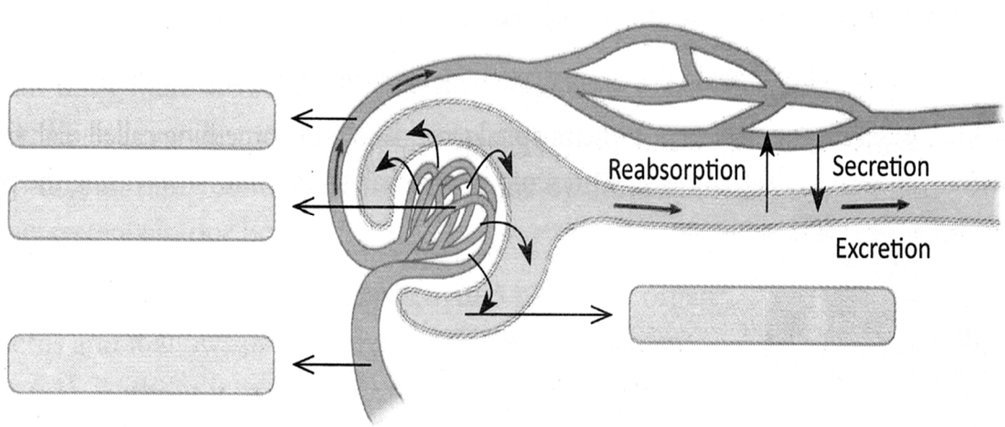
_____

_____

_____

_____

3.



a. Label the parts1, 2, 3 and 4.

b. Name the organelle.

Ans. _____

_____

c. State the role of the organelle in filtration of blood.

Ans. _____

d. State its location and function.

Ans. _____

[F] Very short type questions: [93]

1. What are excretory organs? Give examples.

Ans. _____

2. What are bile pigments? Where are they produced?

Ans. _____

3. Define the following:

a. Ureters : _____

b. Urinary bladder : _____

c. Urethra : _____

4. What is urinary incontinence?

Ans. _____

5. What do you understand by urinary tract infection?

Ans. _____

[G] Short answer type questions: [94]

1. What is excretion? Why is it important?

Ans. _____

2. Describe the structure of the kidney with a well-labelled diagram.

Ans. _____

3. What is Malpighian body? Where is it found?

Ans. _____

4. What is a dialyser? How and why is it used?

Ans. _____

5. What do you understand by the term kidney failure?

Ans. _____

[G] Long answer type questions: [94]

1. What is urinary system? Describe the system with a well-labelled diagram.

Ans. _____

2. Describe the formation and composition of urine.

Ans.

3. Explain the different excretory materials produced in the human body.

Ans.

4. What do you mean by artificial kidney? Describe its function.

Ans.

5. Write a short note on: a. ARF b. ESRD

Ans.