LIFE PROCESS
FORMATIVE ASSESSMENT I
Q.PAPER

MARKS-30 TIME- 70 MINUTES

Instructions:

- Questions : 1 to 5 – 1 Mark each
- Questions : 6 to 9 – 2 Marks each
- Questions : 10 to 13 – 3 Marks each
- Question 14 – 5 Marks

1. Name the site of photosynthesis.
2. What is osmoregulation?
3. Name the excretory unit of kidney.
4. What is neuron?
5. Name the term for transport of food from leave to other parts of the plant.
6. Draw the diagram of cross – section of a lead and label the following in it:
    a. Chloroplast
    b. Guard cell
    c. Lower epidermis
    d. Upper epidermis
7. What do you mean by double circulation of blood?
8. Explain why Bile juice does not contain any digestive enzymes, yet it is essential for digestion.
9. How would non – secretion of hydrochloric acid in our stomach affect food digestion? Explain.
10. How does nutrition takes place in Amoeba?
11. Draw a diagram of cross section of human heart. Show the path of flow of blood with the help of arrows.
12. How water is transported upwards in plants?
13. Descried the functioning of nephrons.
14.
    a. Draw a diagram of human alimentary canal.
    b. Label the following – oesophagus, liver, gall bladder, and duodenum.
    c. What is the function of liver in human body?

HOTS QUESTIONS (SOLVED / UNSOLVED)

Q1. Why is it necessary to separate oxygenated and deoxygenated blood in mammals and birds?
Ans. The mammals and birds are warm-blooded animals which have high energy needs because they constantly require energy to maintain their body temperature. It is necessary to separate oxygenated blood and deoxygenated blood in mammals and birds because such a separation allows a highly efficient supply of oxygen to the body cells which is required for producing a lot of energy needed by them.
Q2. How is small intestine designed to absorb digested food?
Ans. The inner surface of small intestine has millions of tiny, finger like projections called Villi. The presence of villi gives the inner walls of the small intestine a very large surface area. The large inner surface area of small intestine helps in the rapid absorption of the digested food.

LIFE PROCESSES
ORAL QUESTIONS

1. Do plants also need oxygen?
2. How does food passes through alimentary canal?
3. What regulate the exit of food from the stomach into small intestine?
4. In which part of the alimentary canal food is completely digested absorbed?
5. In which cell organelle breakdown of pyruvate takes place using oxygen?
6. Which structures stop backward flow of blood in atria and ventricles?
7. The filtered urine is collected in which part of nephron?
8. Which part of the plant excretes some waste substances into the soil?
9. Name the process used to remove urea from the blood.
10. The process by which evaporation of water from the plants mainly through the stomata.

QUIZ

1. Digestion of starch in humans takes from which organ?
2. Absorption of energy takes place in sunlight by the pigment.
3. Is chloroplast is non – lining structure?
4. What is the function of amylase?

5. Name the organ responsible for respiration in fish.

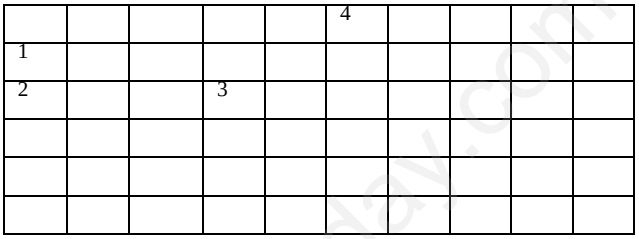
6. Which is more harmful urea or ammonia?

7. Which contains less nitrogenous wastes, the renal vein or renal artery?

PUZZLES

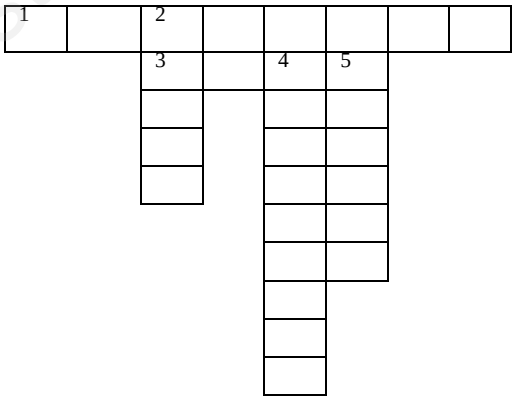
1. ⇒ **Across**
   2. Aerial part which eliminates waste from the plant body
   4. Unicellular plant that carryout fermentation.

   ⇓ **Down**
   1. Transports oxygen in the body.
   3. Carry impure blood.

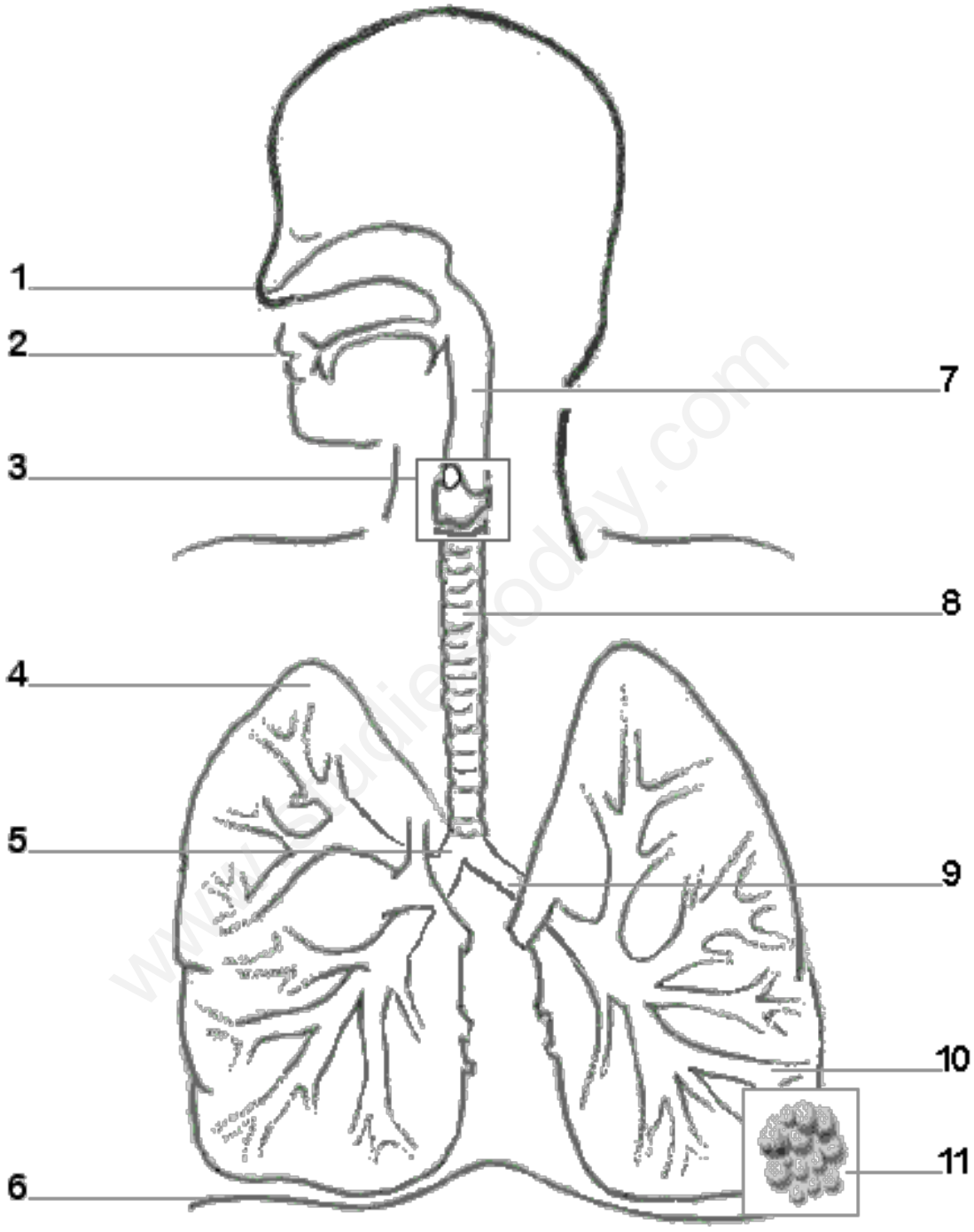


2. ⇒ **Across**
   1. Help in respiration in water.
   5. Removed through urine.

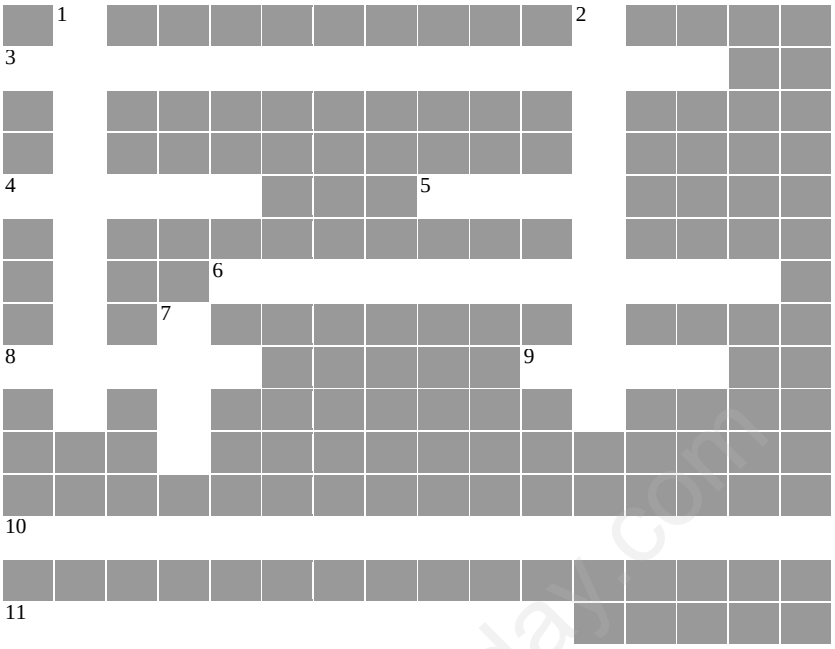
   ⇓ **Down**
   2. Help to breath in air
   3. The process by nitrogenous waste is removed.
   4. Organism that takes in food with the help of pseudopodia.



Label The Diagram Of Respiratory System



- Cross word puzzle- Circulatory system



Clues for solving the cross word puzzle

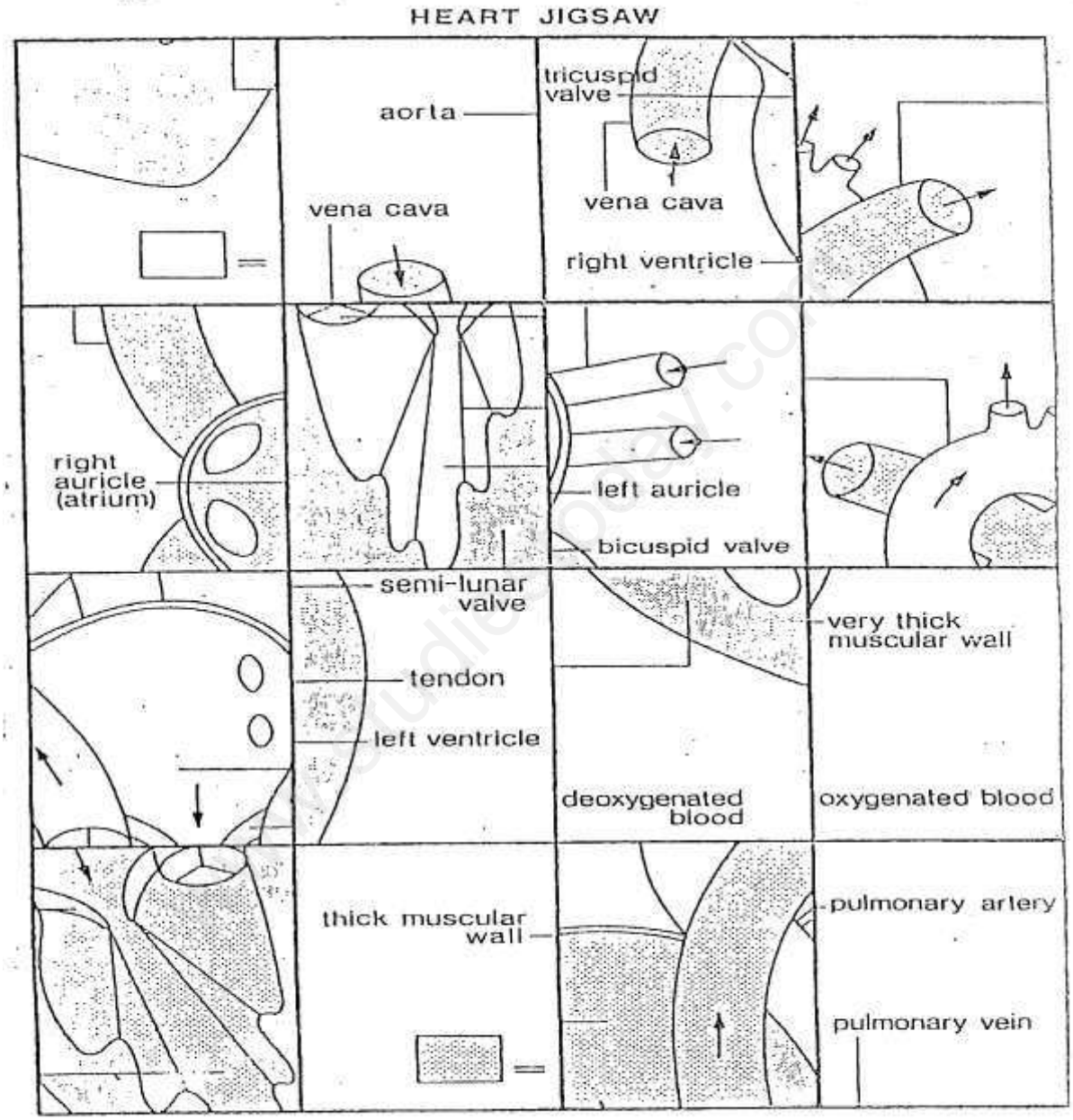
ACROSS

3. The only vein that carries oxygenated blood to the heart
4. The organ which beats continously to act as a pump for the transport of blood.
5. The number of chambers in the human heart.
6. A doctor uses this instrument to amplify the sound of the heart.
8. The two upper chambers of the heart.
9. The heart is located on this side of the chest cavity.
10. The only artery that carries deoxygenated blood from the heart.
11. They form the connection between the arteries and veins

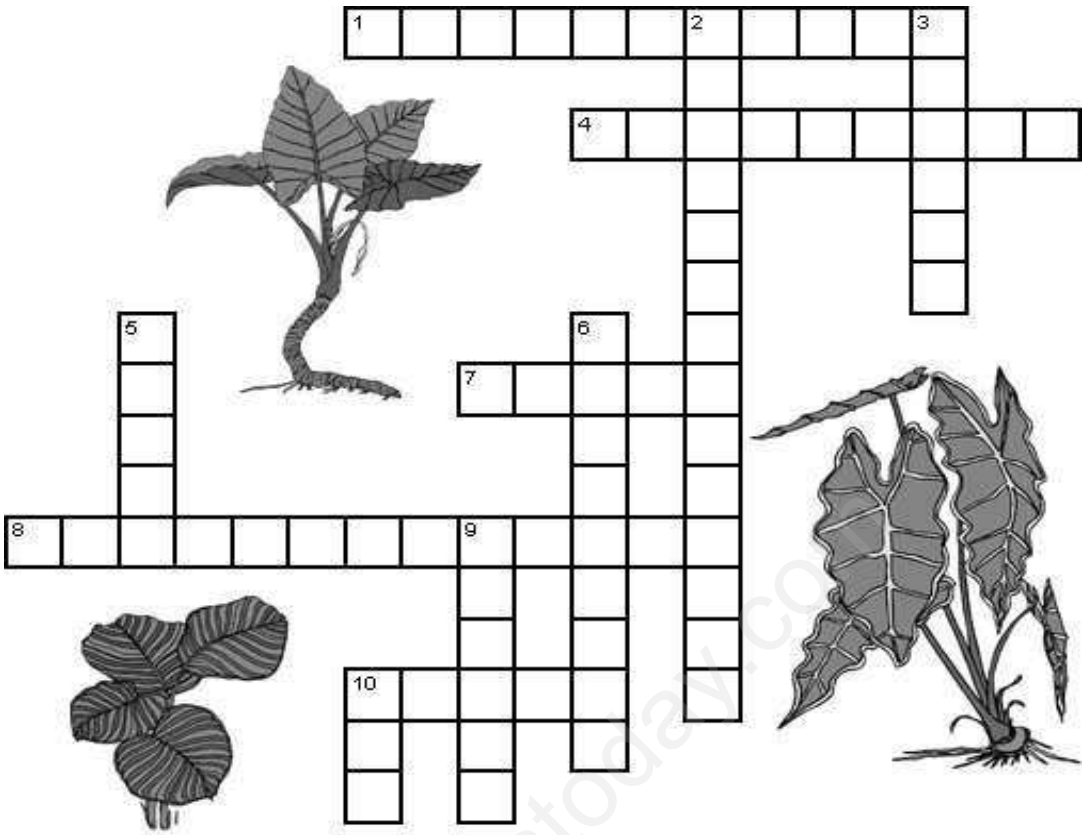
DOWN

1. The number of heart beats per minute.
2. The two lower chambers of the heart.
7. The heart is roughly the size of your _____.

- To understand the structure of heart the students can the following jig-saw puzzle.



Photosynthesis – Crossword puzzle



Across

1 A plant pigment that absorbs sunlight. (11)

4 The links between the energy that carnivores get from eating to the energy captured by photosynthesis. (4,5)

7 Chlorophyll absorbs every color of sunlight except this. (5)

8 A compound needed for photosynthesis. (6,7)

10 The product of photosynthesis. (5)

Down

2 The process by which plants and some bacteria use the energy from sunlight to produce sugar. (14)

3 Part of the plant where photosynthesis generally occurs. (6)

5 A compound needed for photosynthesis. (5)

6 An animal that eats plants. (9)

9 A by-product of photosynthesis. (6)

10 Number of molecules of oxygen produced along with one molecule of sugar. (3)