

STATE SCHOOL THIRUVALLA
SECOND TERMINAL EXAMINATION 2019-20
BIOLOGY

STD: VII

TIME: 2 HOURS
MAX. MARKS: 80

SECTION -A (40 MARKS)

Question 1

a. Name the following

1. Structural and functional unit of kidney.
2. Energy currency of the cell.
3. A plant with a variegated leaf.
4. The phylum that includes animals with jointed foot
5. The organ that produces urea

(5)

b. Define the following terms

1. Excretion
2. Photosynthesis
3. Osmoregulation
4. Destarching
5. Dialysis

(5)

c. Write down the functions of the following

1. Chlorophyll
2. Kidney
3. Phloem
4. Tentacles
5. Stomata

(5)

d. Give one point of difference between the following pairs on the basis of what is given in the brackets

(5)

1. Photosynthesis and respiration (End products)
2. Arthropoda and Mollusca (Body covering)
3. Liver and Lungs (Products excreted)
4. Urinary bladder and Urethra (Function)
5. Invertebrates and Vertebrates (Definition)

e. Given below are sets of four terms. Out of which one do not belong to the group to which the others belong . Identify the odd one and name the category to which the others belong

(4)

1. Hydra, Amoeba, Tape worm, Frog
2. Camel, Lion, Bat, Turtles
3. Urea, Uric acid, Ammonia, Bile
4. Skin, Liver, Lungs, Kidney

f. Write the exact locations of each of the following

1. Kidney
2. Sweat gland
3. Chlorophyll
4. Guard cells
5. Mesophyll cells

g. Match the items in column A with that given in column B

Column A

1. Parasite
2. Ethanol
3. Nephridia
4. Birds
5. Lizard

Column B

- Earth worm
Liver
Kidney
Aerobic respiration
Hollow bones
Tape worm
Anaerobic respiration
Chordate

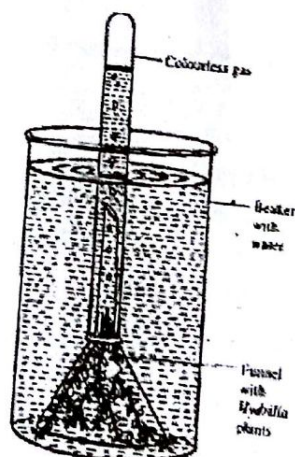
h. Given below in the box are a set of terms which can be matched into seven pairs. seven pairs one has been done for you as an example. Write out the remaining matching pairs made by you as 1 to 6.
eg :Sponge - Porifera

Cat, Sea anemone, Annelid, Pisces, Mammalia, Earthworm, Crab, Coelenterates, Rohu, Arthropods, Mollusca, Sponge, Porifera, Aves, Amphibian, Kiwi

SECTION – B(40 marks)

Question 2

a. Given below is an experimental set up to demonstrate a physiological process. carefully and answer the questions that follow.



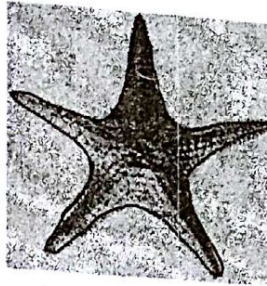
1. Name the physiological process
2. What is the aim of the experiment?
3. Represent the above process in the form of an equation.
4. What are the raw materials required for this process and mention their source
5. What is the significance of this process?

1. Photosynthesis do not occur at a temperature above 40°C.
2. Excretion is a necessary process.
3. Aerobic respiration yield more energy.
4. Photosynthesis is the reverse process of respiration.
5. It is good to sleep under a tree during a hot mid day.

(5)

Question 3

- a. Given below is a picture of an animal. Study it carefully and answer the questions that follow.



(5)

1. Identify the kingdom to which the above animal belongs.
2. Give any two characteristics of the above phylum.
3. Is it a vertebrate or an invertebrate? Give reason.
4. Explain the following terms.
 - (i) Heterotrophs
 - (ii) Locomotion

b.

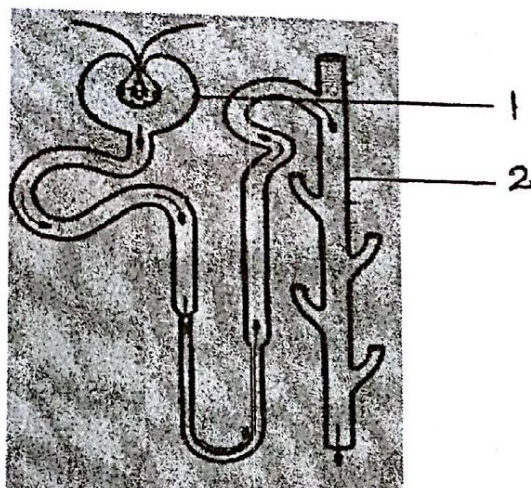
(5)

1. Draw a neat labelled diagram of stomata which is open.
2. Mention any two ways by which a plant is adapted to carry out photosynthesis.
3. Too much light affects photosynthesis. Explain.

Question 4

- a. Given below is the diagram of a part associated with human excretory system. Study it carefully and answer the questions that follow.

(5)



1. Label the parts numbered 1 and 2.
2. How is urine produced in human beings?
3. Name the following
 - (i) Blood vessel which carry blood to the kidney.
 - (ii) Blood vessel which carry blood away from kidney.
4. Draw a well labelled diagram of a human excretory system.

4. Explain the following biological terms

1. Kidney stone
2. Autotrophs
3. Diabetes Mellitus
4. Phylum coelentrata
5. Urinary tract infection.

Question 5

a.

1. Define respiration.
2. Write any two points of differences between aerobic respiration and anaerobic respiration.
3. Write the word equations for
 - (i) Aerobic respiration
 - (ii) Anaerobic respiration.

b. The following paragraph is the steps to conduct starch test in green leaves. Complete the following paragraph by using suitable word or words.

To test a leaf for starch, pluck a leaf which has been growing in bright sunlight. Pluck a leaf in a beaker with (i)----- for 2-3 minutes to kill the cells and de- (ii)----- . Take the leaf out of the beaker and place it inside a tube containing boiling (iii)----- . After ten minutes the leaf will lose (iv)----- . Wash the leaf and add iodine solution. If starch is present a (v)----- color is obtained.