

MAR THOMA RESIDENTIAL SCHOOL THIRUVALLA
SECOND TERMINAL EXAMINATION 2018-19
BIOLOGY

STD: VII

TIME: 2HRS
MAX.MARKS:80

SECTION -A (40 MARKS)

Question 1

- (a). Name the following (5)
- (i) Blood vessel that carry blood to kidney.
 - (ii) Two nitrogenous waste materials generated in our body.
 - (iii) Reproductive structure in a gymnosperm.
 - (iv) Organ for locomotion in a star fish.
 - (v) Storage form of glucose in roots of the plant.
 - (vi) Structural and functional unit of a kidney.
 - (vii) A plant with variegated leaf.
 - (viii) Root like structure in a bryophyte.
 - (ix) The mode of nutrition in green plants.
 - (x) The condition in which excess glucose is present in the urine.
- b. Define the following terms (6)
- (i) Excretion
 - (ii) Locomotion
 - (iii) Photosynthesis
 - (iv) Osmoregulation
 - (v) Dialysis
 - (vi) Spore
- c. Write down the functions of the following (5)
- (i) Nephridia
 - (ii) Kidney
 - (iii) Tentacles
 - (iv) Urinary bladder
 - (v) Stomata
- d. Give one point of difference between the following pairs (5)
- (i) Xylem and Phloem
 - (ii) Aerobic respiration and Anaerobic respiration
 - (iii) Photosynthesis and Respiration
 - (iv) Dicot plants and Monocot plants
 - (v) Autotrophs and Heterotrophs
- e. Find the odd one and give reason (10)
- (i) Snail, Slug, Octopus, Tapeworm
 - (ii) Cow, Bat, Dog, Crow
 - (iii) Ureter, Urinary Bladder, Urethra, Liver
 - (iv) Skin, Lungs, Liver, Stomach
 - (v) Sunflower, Pea, Maize, Brinjal

f. Write the exact location of each of the following

- (i) Sweatgland
- (ii) Kidney
- (iii) Chlorophyll
- (iv) Guard cells

g. The following paragraph explains the steps to do starch test in a leaf. Read the paragraph and fill the blanks with appropriate term or terms.

Pluck a leaf from a plant growing in the bright sun. It is kept in a beaker with (i) _____ and boil for 2 minutes to (ii) _____ its (iii) _____ and (iv) _____. Now its (v) _____. It makes the leaf permeable to (vi) _____. Now dip the leaf in boiling (vii) _____. After 10 minutes the leaf loses its (viii) _____ becomes colourless. If starch is present, the leaf becomes (ix) _____ in colour. It becomes (x) _____ colour if starch is absent.

SECTION B –(40 marks)

Question 2

a.(5)

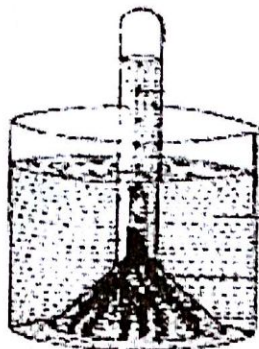
- (i) Draw a neat labelled diagram showing the internal structure of a kidney.
- (ii) What are the two possible ways by which a person with kidney failure get relief?

b. Give reasons

- (i) Palisade tissues absorb more sunlight.
- (ii) Photosynthesis do not occur at temperature above 40° Celsius.
- (iii) Excretion is a very essential process in a living organism
- (iv) Sleeping under a tree during hot mid-day is good.
- (v) Bryophytes are known as the amphibians of plant kingdom

Question 3

a. Given below is an experiment to prove certain physiological process in plants. Study carefully and answer the questions that follow.



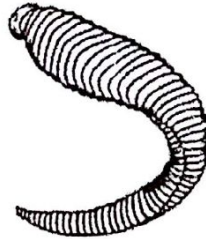
- (i) What is the aim of the experiment?
- (ii) Name the gas that gets collected in the test tube.

- (iii) How do you prove it?
 (iv) Name the plant used in the above experiment.
 (v) What are the factors essential for this physiological process to take place?
 (vi) Represent the process in form of an equation.

b. Explain the opening and closing of stomata with the help of a diagram (5)

Question 4

a. Given below is the picture of an animal. Study it and answer the questions that follow (5)



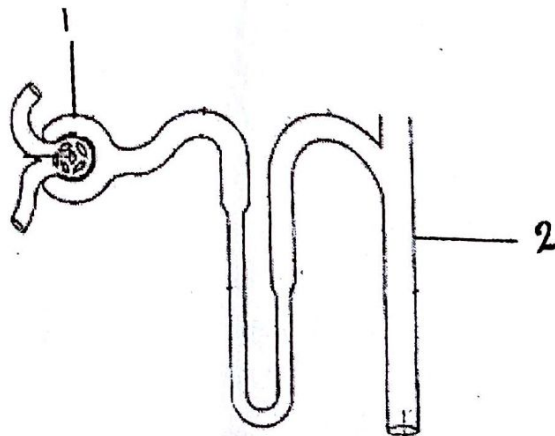
- (i) Name the phylum to which it belongs.
 (ii) Write any two characteristics of the above phylum.
 (iii) Name any two endoparasites in man
 (iv) What are vertebrates?

b. (5)

- (i) Define respiration
 (ii) Write the word equations for
 (a) Aerobic respiration (b) Anaerobic respiration
 (iii) Aerobic respiration yields more energy than anaerobic respiration.
 (iv) Name any two organisms that undergo anaerobic respiration.

Question 5

a. Given below is a structure associated with human excretory system. Study it and answer the questions that follow: (5)



- (i) Label the parts 1&2
 (ii) What is the function of this structure?
 (iii) How is urine formed in the kidney?
 (iv) List out the components of urine.

Answer the following questions

- (i) What is the role of Chlorophyll in photosynthesis?
- (ii) Write any two ways by which a leaf is adapted to carry out photosynthesis?
- (iii) How is kidney stone formed?
- (iv) What is the significance of photosynthesis?
- (v) Write any two characteristics of class Aves