

**MAR THOMA RESIDENTIAL SCHOOL THIRUVALLA**  
**ANNUAL EXAMINATION 2018-19**  
**BIOLOGY**

STD: VII

TIME: 2 Hours

MAX.MARKS:80

**SECTION -A (40 MARKS)**

**Question 1**

- a. Name the following (5)
1. Gland in a human body where response occurs
  2. Inflammatory chemicals released during an allergic reaction
  3. Cytoplasmic extensions of the cyton in a neuron
  4. The bacterium that converts milk into curd
  5. The group of plants with seeds but no fruits
- b. Define the following terms (5)
1. Allergy
  2. Coordination
  3. Osmoregulation
  4. Photosynthesis
  5. Classification
- c. Write down the exact location of the following (5)
1. Kidney
  2. Chlorophyll
  3. Sweat glands
  4. Capsule
  5. Synapse
- d. Write down any one function of each of the following (5)
1. Xylem
  2. Nephron
  3. Olfactory nerve
  4. Tendons
  5. Rhizoids
- e. Differentiate the following pairs on the basis of what is given in the bracket (5)
1. Stimulus and response (Definition)
  2. Cuboidal epithelium and columnar epithelium (Functions)
  3. Monocot plants and Dicot plants (Root system)
  4. Photosynthesis and Respiration (Equation)
  5. Pollen grains and Peanuts (Type of allergy caused)

f. Give below is five sets of four terms each. In each set there is one term which does not belong to the group to which the other three belongs. Identify the odd term and give reason (5)

1. Muscle coordination, Heartbeat, Peristalsis, Breathing
2. Skin, Kidney, Lungs, Liver
3. Amoeba, Paramecium, Chlamydomonas, Mushroom
4. Hay fever, Asthma, Hives, Athlete's foot
5. Sunflower, Pea, Brinjal, Grass

g. Note the relationship between the first two words and suggest the suitable word or for the fourth place. [5]

- 1 Balance: Cerebellum:: Memory: \_\_\_\_\_
- 2 Spores: Pteridophyte:: Cones : \_\_\_\_\_
- 3 Parenchyma: Simple tissue:: Phloem : \_\_\_\_\_
- 4 Kidney: Nephron::Nervous system: \_\_\_\_\_
- 5 Bacteria: Monera:: Bread Mould : \_\_\_\_\_

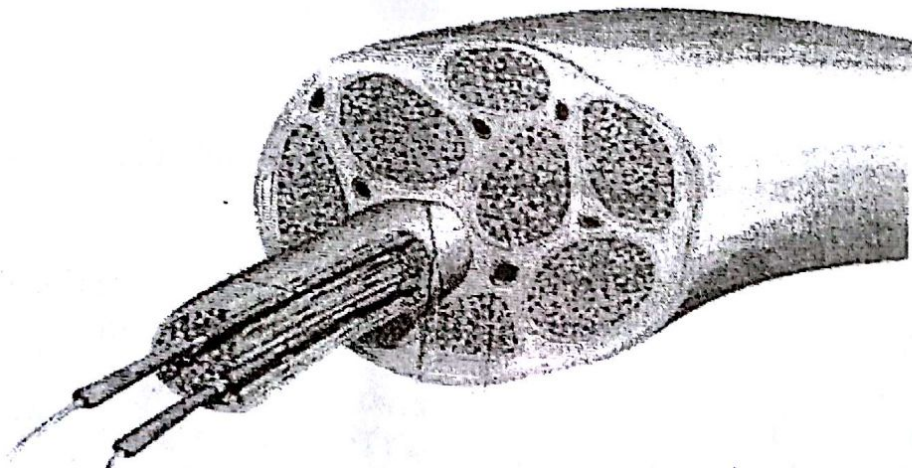
h. Match the items given in column A with the most appropriate ones in column B and rewrite the correct matching pair. [5]

- |   |                              |   |                 |
|---|------------------------------|---|-----------------|
| 1 | Fibrous connective tissue    | - | Wind pipe       |
| 2 | Supportive connective tissue | - | Skeletal muscle |
| 3 | Striated Muscle              | - | Kidney tubule   |
| 4 | Fluid connective tissue      | - | Ligaments       |
| 5 | Ciliated epithelium          | - | Cartilage       |
|   |                              |   | Lymph.          |
|   |                              |   | Intestine       |

**SECTION B – (40 marks)**

**Question 2**

a. Give below is the diagram of a structure associated with nervous system in man. and answer the questions that follow

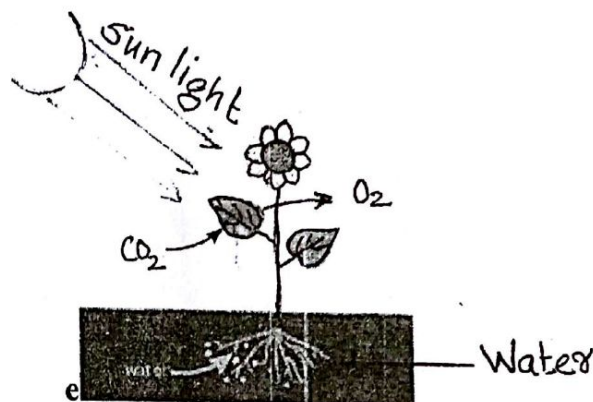


1. Identify the structure and explain it.
2. Name the different types of the above structures found in our body.
3. Write down any two functions of the spinal cord.
4. Give the biological terms for the following
  - (i) The nerve that carry impulses for hearing
  - (ii) The chemical messengers in the body.

- b. 1 Draw a well labelled diagram showing the human excretory system (5)
- 2 Write down the cause and any two symptoms of the urinary tract infections
- 3 Suggest and explain any one way by which a person with kidney failure can get a relief

### Question 3

- a. Given below is a diagram showing a process in plants. Study it carefully and answer the questions that follow. (5)



1. Identify the physiological process. What is its significance?
2. Mention any three ways by which the plants are adapted for the above process.
3. What is the role of sun light in the process shown above?
4. Name the structure seen on leaves which allow the gaseous exchange.  
Draw a diagram showing its closed state

- b. Give biological explanations for the following (5)

1. Children with milk allergy show a reaction to beef
2. Sleeping under a tree during hot mid-day is good.
3. Excretion is a necessary process in a living organism
4. Aerobic respiration is more efficient than anaerobic respiration
5. Photosynthesis do not occur if intensity of light is very high

### Question 4

- a. 1. Draw a well labelled diagram of a neuron. (5)
2. What is its function?
3. Cerebellum is well adapted to accommodate more neurons. How?
4. Mention any two activities in a human body that is controlled by cerebrum

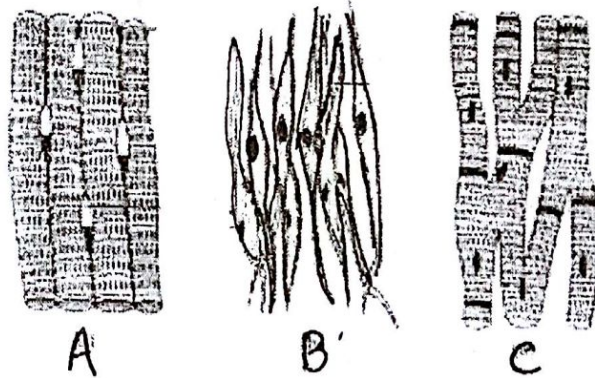
b. Give the biological term for the following

(5)

1. The part of the brain that gets affected by alcohol
2. The disease in which the glucose content in urine is high
3. Blood vessel that carry blood to kidney
4. The reagent used to test the presence of starch in leaves
5. The process of reproduction in which an amoeba divides into two equal
6. The nitrogen fixing bacteria in a leguminous plant
7. The group of animals with a backbone
8. Outbreak of swollen, pale red bumps on the skin due to an allergic reaction
9. The long, narrow, thick walled, dead cells found on veins of a leaf.
10. The major waste produced in an amoeba

### Question 5

a. The diagram given below shows a group of tissues found in human being. Observe them carefully and answer the questions that follow



1. Identify the tissues A, B, C.
2. Name the tissue system to which it belongs
3. Write down any one character and one location each for A, B and C.

b. Answer the following

1. Why do we prefer allergic blood test over skin prick test?
2. How will you classify bacteria on the basis of their shape?
3. What happens to the energy obtained during respiration?
4. Name any two accessory excretory organs in our body. List out the wastes excreted by each of them.
5. List out any two characteristics of a meristematic tissue.