

MAK THOMA RESIDENTIAL SCHOOL THIRUVALLA
ANNUAL EXAMINATION 2017-18
BIOLOGY

STD: VII

TIME: 1HR 30 MNS
MAX.MARKS:80

SECTION –A (40 MARKS)

Question 1

a. Name the following (10)

1. Balloon like air sacs in the lungs
2. Anti – inflammatory chemicals released during an allergic reaction
3. Protein present in an egg
4. The fluid that fill the space between organs
5. Part of the excretory system that stores urine .
6. Solution used to test the presence of starch in food samples
7. Unit to measure energy in food
8. Functional unit of a kidney
9. Tissue that conduct message from one part to another.
10. Wrong beliefs about the intake of food

b. Define the following terms (5)

1. Tissue
2. Balanced diet
3. Cellular respiration
4. Osmoregulation
5. Allergen

c. Write down the functions of the following (5)

1. Aerenchyma cells
2. Cartilage
3. Adipose tissue
4. Chlorophyll
5. Platelets

d. Give the location of the following (5)

1. Glomerulus
2. 'C'- shaped cartilaginous rings
3. Diaphragm
4. Ciliated epithelium
5. Sclerenchyma

e. Give one point of difference between the following pairs (10)

1. Collenchyma and Parenchyma
2. Tendons and Ligaments
3. Oxyhaemoglobin and carbaminohaemoglobin
4. Apical Meristem and Lateral Meristem
5. Autotrophic nutrition and heterotrophic nutrition

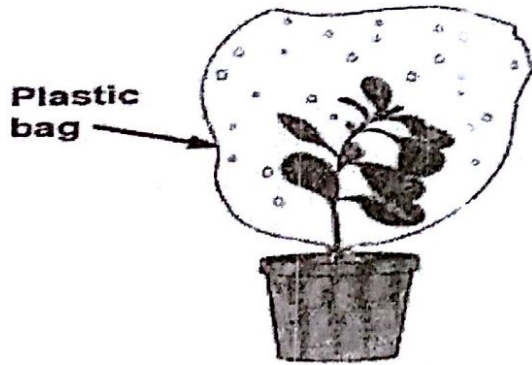
f. Find the odd one and give reason (5)

1. Sucrose, Maltose, Lactose, Cellulose
2. Oesophagus, Pancreas, stomach, Larynx
3. Goitre, Rickets, Scurvy, Beriberi
4. Hay fever, Asthma, Dermatitis, Dengue
5. Biosphere, Population, Organ, Community

SECTION B -(40 marks)

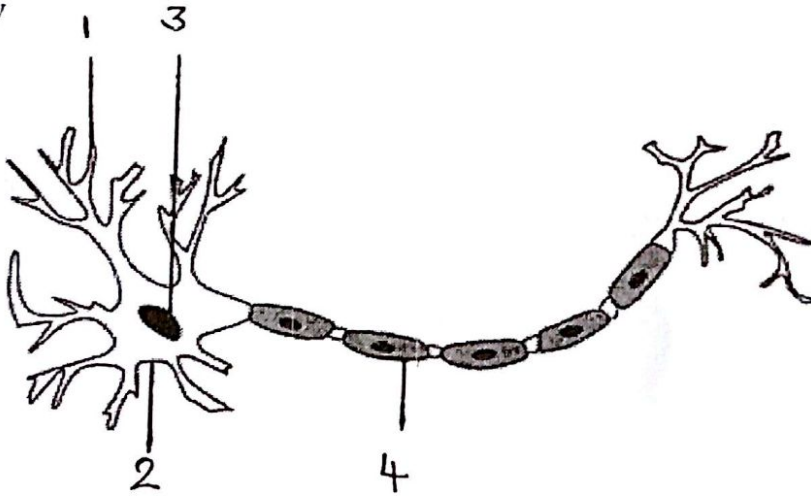
Question 2

a. The diagram below shows an experiment. Study it and answer the questions that follow (5)



1. Name and define the process studied in the above experiment.
2. What is the significance of the process?
3. Mention any two factors that affect this process.
4. Name any two excretory products in plants

b. Given below is a certain cell of the human body. Study it and answer the questions that follow (5)

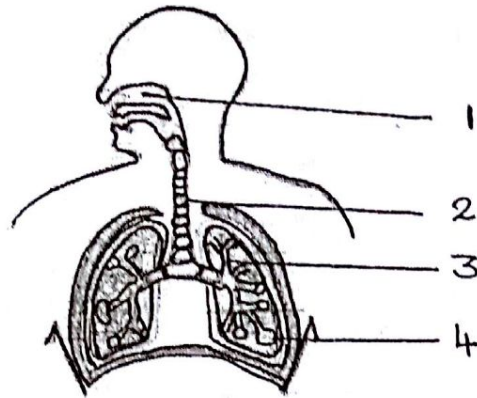


1. Identify the cell.
2. Label the parts numbered 1 -4
3. Name the organ system of the body to which it is associated
4. Name the organ system that includes skin, nail and horns

Question 3

- a.
1. Draw a labelled diagram of the human excretory system.
 2. What is the first step in the formation of urine? Explain

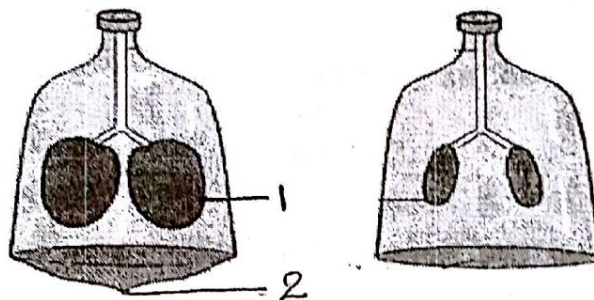
b. Given below is the diagram of human respiratory system. Study it and answer the questions that follow (5)



1. Label the parts numbered 1 – 4.
2. Name the part that produces sound.
3. Mention any one function each of the parts labelled 1 and 4.

Question 4

a. The diagram below demonstrates the mechanism of a physical process. Study it and answer the following questions (5)



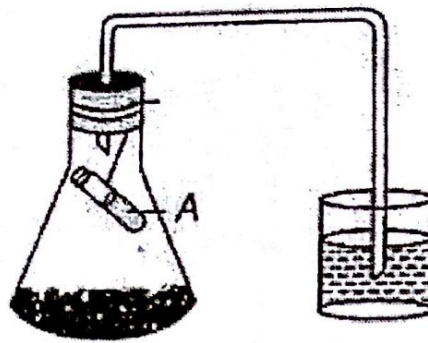
1. Name the process
2. Identify the organs labelled 1 and 2
3. Explain the role of part 2 in the process studied here.
4. Give a brief account on the structure of part labelled 1

b. Explain the following biological terms (5)

1. Roughage
2. Obesity
3. Dialysis
4. Involuntary muscles
5. Tracheal system

Question 5

a. Given below is an experimental set up to demonstrate a certain physiological process in man. Study it carefully and answer the questions that follow (5)



1. Name the process.
2. Represent it in the form of an equation.
3. What is the aim of this experiment?
4. What is the substance taken in the test tube? What is its role in the experiment?

b. Answer the following

(5)

1. Why it is dangerous to sleep under a tree during night?
2. Mention the different possible ways by which an allergen can enter a living body.
3. "Transpiration occurs only during day time." Why?
4. Why should we eat calcium rich diet to keep our bones healthy?
5. List out any two characteristics of a permanent tissue