

MAR THOMA RESIDENTIAL SCHOOL, TIRUVALLA
ANNUAL EXAMINATION 2019-20
BIOLOGY

MARKS: 80
TIME: 2 Hours

Class VIII

SECTION I (40 MARKS)

Question 1

(A) Name the following [5]

1. Scientist responsible for green revolution in India.
2. A disease caused due to Plasmodium.
3. A wave of electrical disturbance that runs through the nerves.
4. Lower part of the brain that joins with the spinal cord and controls the heartbeat, respiration and peristalsis.
5. An immediate care given to the victim at the time of emergency before he/she is taken to the doctor.

(B) Define the following terms [5]

1. Osmosis
2. Differentiation
3. Stimulus
4. Vectors
5. Organic farming

(C) State one function of each of the following [5]

1. Phloem
2. Glucagon
3. Pericardial fluid
4. Fallopian tube
5. Lymph

(D) Give reason [5]

1. Testes lie outside the abdomen, in a scrotum.
2. Root hairs are suited for absorbing water from the soil.
3. Public hygiene is equally important as personal hygiene.
4. Farmers prefer to grow certain crops by vegetative method.
5. Leguminous crops act as natural fertilisers.

(E) Differentiate between the following pairs on the basis of what is given in brackets [5]

1. Vaccination and Immunisation [Definition]
2. Arteries and Vein [Flow of blood]
3. Thyroid and Pituitary [Location]
4. Food crops and Cash crops [Examples]
5. Potassium and Iron [Deficiency symptom]

(F) Write true or false. If it is false rewrite the sentence by changing first or last word. [5]

1. Pollen is produced in the style.
2. The eggs are produced in the oviduct.
3. Insulin hormone is secreted by Pituitary.

4. The two lower chambers of the heart are called auricles.
 5. The structural and functional unit of nervous system is a nephron.
- (G) Choose the correct answer from the four options given below

[5]

- Rearing of birds for egg and meat is called
 - Apiculture
 - Poultry Farming
 - Sericulture
 - Pisciculture
- Which one of the following is not a psychotropic drug?
 - Morphine
 - Cocaine
 - Heroin
 - Penicillin
- Chikungunya is caused by
 - Protozoan
 - Virus
 - Mosquitoe
 - Fungus
- The rate of transpiration will be fastest when the day is:
 - cool, humid, windy
 - hot, humid, windy
 - hot, humid, still
 - hot, dry, windy
- Reproductive whorls of a flower are:
 - Stamens and carpels
 - Sepals and petals
 - Sepals and stamens
 - Petals and carpels

(H) Fill in the blanks with suitable words

[5]

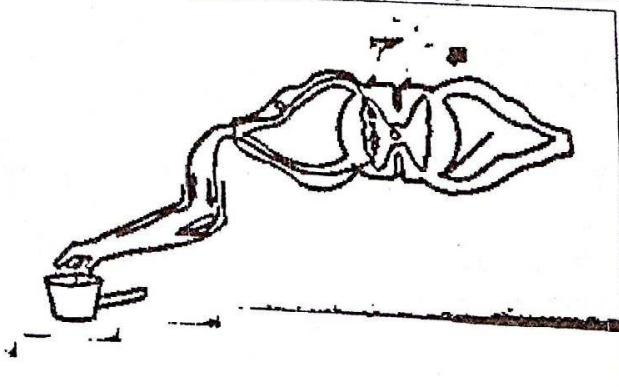
- The artificial rearing of silkworm and production of silk from them is called.....
- The idea of vaccination was conceived by
- The oxygen rich blood is pumped to different parts of the body through.....
- Insufficient amount of growth hormone causes..... and excess secretion results in.....

SECTION II (40 MARKS)

Question 2

below is a diagram of a reflex arc. Study the same and answer the following question

[5] Given



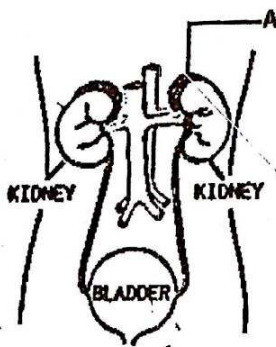
- (i) Define reflex arc.
- (ii) Name two types of reflexes.
- (iii) Name the part of the brain which is concerned with the following:
 1. Seat of intelligence
 2. Coordinate muscular activity.
- (iv) Complete the following chart

Stimulus received by the sensory receptors (in the fingers)
(a)
Impulse travels through spinal nerves towards the spinal cord
(b)
The impulse passes across the relay neuron to the motor neuron
(c)
(d)
Response is produced by effector organ or muscle

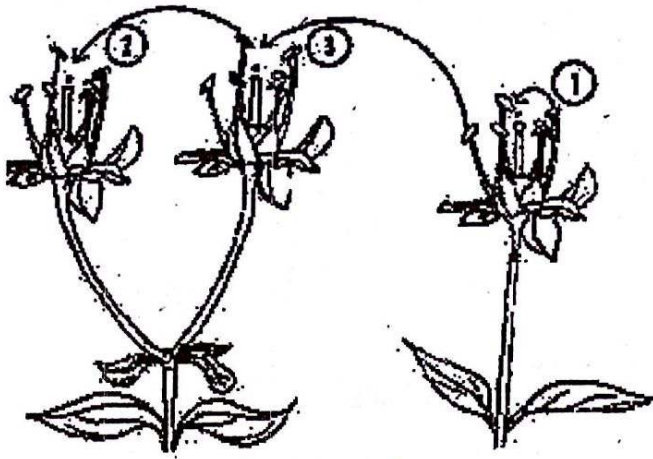
Question 3

[5]

The diagram given below represents an endocrine gland. Study the same and answer the questions that follow.



- (i) Which gland does A represent?
- (ii) Which are the two hormones produced by this gland?
- (iii) Differentiate between exocrine gland and endocrine gland.
- (iv) Why pituitary gland is called the “master gland”?
- (v) What is a hormone?



- (i) Identify the type of pollination that takes place in 1 and 3
- (ii) Differentiate between 1 and 3
- (iii) Name any two agencies for dispersal of seeds
- (iv) Define fertilisation
- (v) How is artificial pollination useful to plant breeders?

Question 5

Answer the following questions

1. "Adolescence is full of challenges and possibilities". [2]
 - a. What are the challenges faced by adolescents?
 - b. What are your suggestions to overcome these challenges?
2. It is easy to be addicted to drugs. But to escape from it, is not that easy [2]
 - a. What should be our approach towards drugs?
 - b. What are the harmful effects of drugs?
3. List out the benefits of "White Revolution" in our country. [2]
4. Burns can be superficial burns, deep burns, or chemical burns. What emergency care you would suggest in each case? [3]
5. Why is it important that a very large number of sperms should be present in the semen? [1]
6. Name two characteristics of flower in which pollination occurs by wind. [1]
7. Write two uses of water in the plant. [2]
8. Explain two economic importance of yeast. [2]

Question 6

Explain the following terms:

1. Tissue fluid
2. Spinal nerves
3. Non-communicable disease
4. Horticulture

[5]

5. Tissue culture

Question 7

Draw a neat labelled diagram of following

[5]

1. Sperm
2. Neuron
3. Bacterium
4. A root hair
5. A single cell of yeast