

GREENLAWNS HIGH SCHOOL
SEMESTER I EXAMINATION
BIOLOGY
VIII – 12/10/23

Maximum Marks: 80

Time allowed: Two hours

Answers to this Paper must be written on the paper provided separately.

The time given at the head of this Paper is the time allowed for writing the answers.

Section A is compulsory. Attempt any four questions from Section B.

The intended marks for questions or parts of questions are given in brackets [].

SECTION A
(Attempt all questions)

Question 1

Choose the correct answers to the questions from the given options.

(Do not copy the question, Write the correct answer only.)

[15]

(i) The cell membrane of root hair is

- | | |
|----------------------|----------------------|
| (a) permeable | (b) Semi – permeable |
| (c) freely permeable | (d) not permeable |

(ii) Water from below rises up in xylem by

- | | |
|---------------------|-------------------------|
| (a) nuclear force | (b) gravitational force |
| (c) capillary force | (d) surface tension |

(iii) Identify the micro nutrient from options given below.

- | | |
|----------------|---------------|
| (a) Zinc | (b) Nitrogen |
| (c) Phosphorus | (d) Potassium |

(iv) The male gamete fuses with female egg to produce.

- | | | | |
|------------|----------------|------------|-----------------|
| (a) embryo | (b) embryo sac | (c) zygote | (d) pollen tube |
|------------|----------------|------------|-----------------|

- (v) Identify the water pollinated flower
- (a) Lotus (b) Trapa
(c) Singhara (d) Vallisneria
- (vi) Is an example of vegetative reproduction by leaf.
- (a) potato (b) onion
(c) bryophyllum (d) carrot
- (vii) Interaction in which both the interacting species are benefitted.
- (a) symbiosis (b) parasitism
(c) predation (d) cannibalism
- (viii) Temperate deciduous forests are found on the _____ of India
- (a) western coast (b) eastern coast
(c) southern coast (d) south-western coast
- (ix) Jaladpara sanctuary in west Bengal is famous for
- (a) Lion (b) Tiger
(c) baboon (d) rhinoceros
- (x) _____ blood group is universal recipient
- (a) A (b) B (c) O (d) AB
- (xi) Identify the heart related condition which increases the risk of stroke.
- (a) palpitation (b) ulcer
(c) hypertension (d) dizziness
- (xii) Fluid that occupy the spaces between the individual cells of the body.
- (a) tissue fluid (b) lymph (c) blood (d) saliva

- (xiii) Identify the viral disease from the following
- (a) measles (b) tuberculosis
(c) malaria (d) typhoid
- (xiv) Scientifically the practice of vaccination is called as.
- (a) vaccine (b) pyrolysis
(c) immunolysis (d) prophylaxis
- (xv) Identify the disease which is not communicable.
- (a) diabetes (b) chicken pox
(c) cholera (d) malaria

Question 2

- (i) Complete the following statements. [5]
- (a) Dengue is spread by a mosquito called aedes _____.
- (b) Heart is divided vertically by a membrane called _____ .
- (c) Non-living components of the ecosystem is known as _____.
- (d) Vegetative parts of the plant capable of giving rise to new plant are called _____.
- (e) Phloem _____ help in the storage of food.
- (ii) Name the following. [5]
- (a) Elongated dead cells with tapering ends found in xylem tissue.
- (b) Reproductive method common in yeast.
- (c) Network of inter-connected food chains.
- (d) Large vein which carry deoxygenated blood from upper part of a body to heart.
- (e) Viral disease which mainly spread through sexual contacts.

(iii) Match the following [5]

- | | |
|--------------------|-----------------------------|
| (a) Gir forests | 1. Psychotropic drug |
| (b) cardiac arrest | 2. Occurs due to blood clot |
| (c) toxoids | 3. Heart stops |
| (d) Heart attack | 4. formalin |
| (e) morphine | 5. lion |
| | 6. tiger |

(iv) Find the odd man out giving reason for your choice [5]

- (a) eagle snake frog grasshopper
- (b) heart arteries capillaries veins
- (c) malaria dengue influenza chikungunya
- (d) ovary anther stigma style
- (e) sunlight wind cooling humidity

(v) Write true or false and correct the underline word and rewrite the statement. [5]

- (a) Conduction in phloem is unidirectional.
- (b) Layering is a natural method of vegetative propagation.
- (c) Insect pollinated flowers contain nectar as food.
- (d) Fauna means the plants naturally occurring in a particular area.
- (e) Fat in the intestine is absorbed through blood vessels.

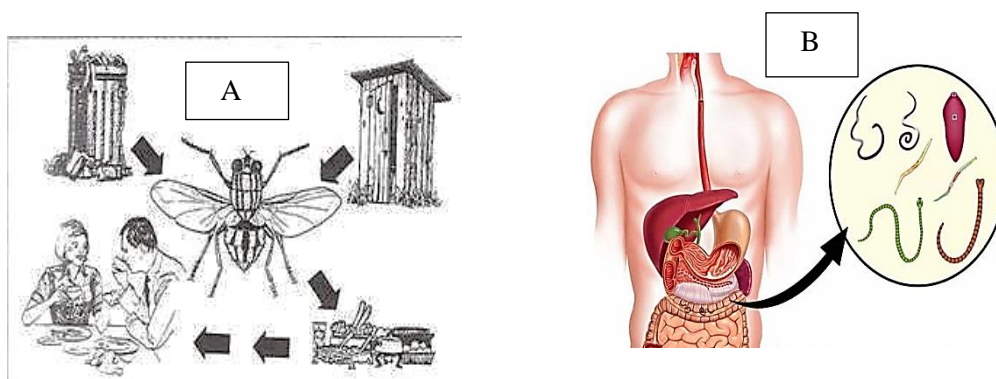
SECTION B

Question 3

- (i) What is osmosis? [1]
- (ii) Write 2 benefits of plant tissue culture technique? [2]
- (iii) Give 2 points, how air is helpful to the biotic components of ecosystem? [2]
- (iv) Distinguish between arteries and veins [w.r.t. flow of blood, position in the body] [2]
- (v) Write and discuss 3 specialties of root hair [3]

Question 4

- (i) Define asexual reproduction. [1]
- (ii) Give 2 functions of xylem vessels. [2]
- (iii) How can we restore the lost balance of ecosystem. [2]
- (iv) Write the correct path of blood flow during pulmonary & systemic circulations. [2]
 - (a) RA → pulmonary arteries → LA → Lungs → pulmonary veins → RV
 - (b) LV → aorta → veins → arteries → vena cava → capillaries → RA
- (v) Observe the diagram carefully and answer the questions given below: [3]

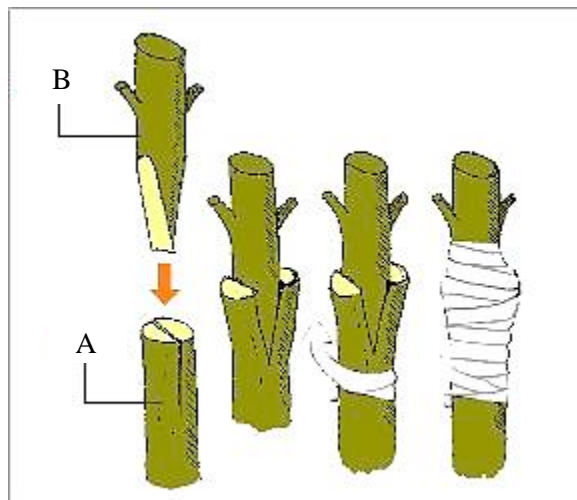


- (a) Identify the host in both the figures.
- (b) In A house fly carry disease causing germ and in B tapeworm is an organism which cause an infection in human intestine.

Here house fly is acting as a _____ and tape worm is a _____.
[parasite, vector]
- (c) In host and parasite relationship, who derives nutrition and who suffers.

Question 5

- (i) Define ecosystem. [1]
- (ii) Distinguish between lymph and blood.[w.r.t. R.B.C's , circulatory path] [2]
- (iii) Write 2 characteristics of wind pollinated plants. [2]
- (iv) Explain the importance of transpiration in plants. (2 points) [2]
- (v) Observe the diagram carefully and answer the questions given below: [3]



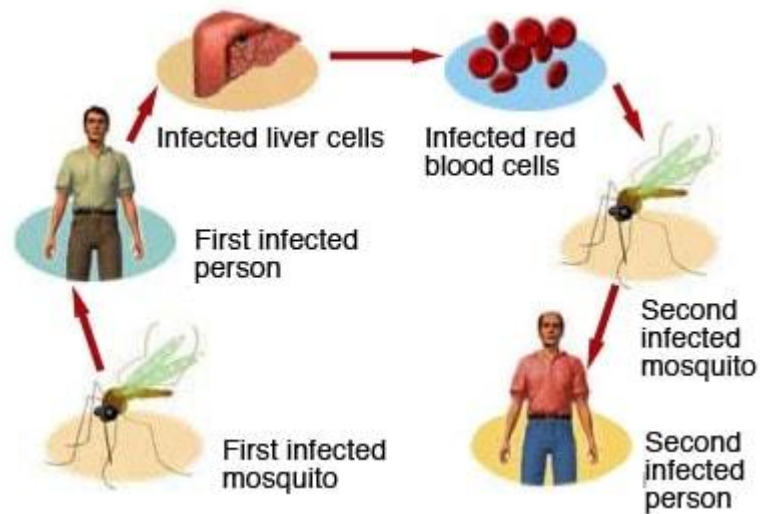
- (a) Name the method utilized for vegetative propagation.
- (b) Identify A and B.
- (c) Why the joint is covered with wax in the above method?

Question 6

- (i) Name the valve that regulate flow of blood from ventricles into arteries. [1]
- (ii) Give two preventive measure for good health related to environment. [2]
- (iii) Explain translocation of solutes (food) in plants. [2]
- (iv) Describe double fertilization in flowering plants. [2]

(v) Observe the diagram carefully and answer the questions given below:

[3]



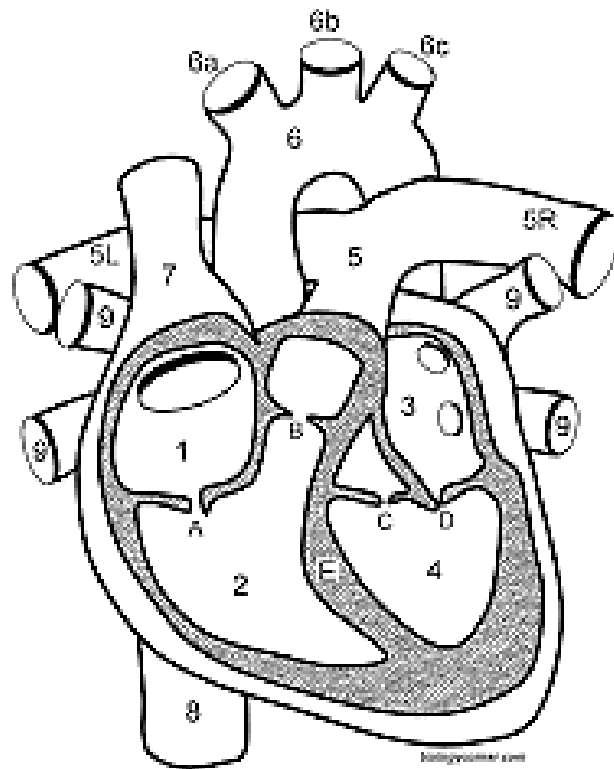
- (a) Name the mosquito which acts as a vector for malaria.
- (b) Name the causative agent of malaria.
- (c) Write the symptoms of malaria?

Question 7

- (i) Define disease. [1]
- (ii) Write about the first aid given in case of unconsciousness. [2]
- (iii) List the four methods use to prepare vaccine. [2]
- (iv) Write in correct order [2]
 - (a) eagle, frog, snake, grasshopper, grass
 - (b) grasshopper, crow, lizard, grass

(v) Observe the diagram carefully and answer the questions given below:

[3]



- (a) Name the section of heart marked as 2, 3, 5 and 8.
- (b) Name the valve which guard the opening between 1 and 2. How many cusps it have?