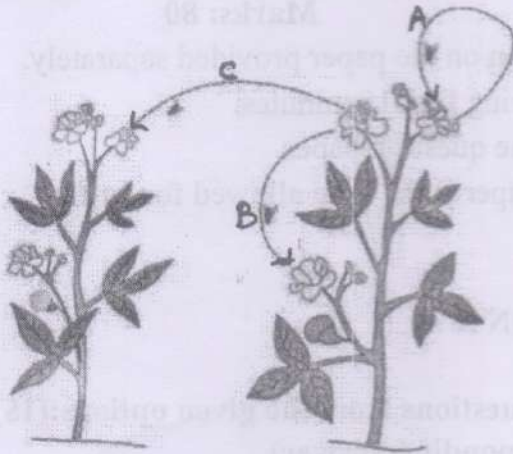


vii) In flowering plants, male gamete is formed inside _____.

- a) Ovary b) Anther c) Pistil d) Ovule

viii) Which of the following options depict cross –pollination in the given diagram?



- a) A & B b) B & C c) Only B d) Only C.

ix) Which of the following is the biggest artery present in our body?

- a) Aorta b) Pulmonary artery c) Renal artery d) Coronary artery

x) Wind pollinated flowers are _____

- a) Large and scented. b) Small with sticky pollen grains
c) Small with dry pollen grains d) Large and dull coloured.

xi) Statement A – Plants produce their food as sucrose.

Statement B – Plants store their food in form of starch.

- a) A & B both are correct b) A is wrong, B is correct
c) A is correct, B is wrong d) A & B both are wrong

xii) Rohit's blood group is O positive, so he will have _____ antigen present on his RBC.

- a) A b) B c) A & B d) Neither A nor B

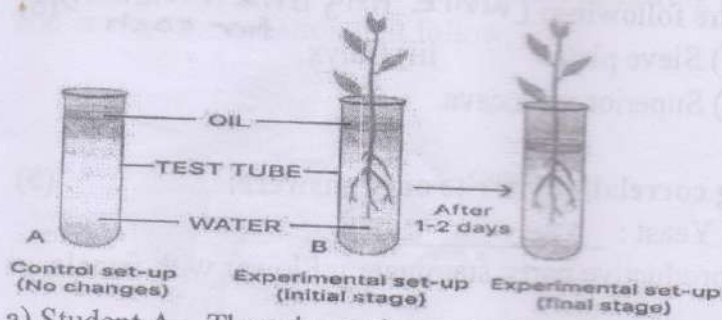
xiii) The mode of reproduction in which plants parts are used to develop new plant is called

- a) Spore formation b) Vegetative propagation
c) Binary fission d) Sexual reproduction

xiv) During night time, transpiration in plants _____.

- a) decreases b) increases c) remains the same d) hardly occurs.

xv) For the following experiment, four students wrote their observation. Whose observation is correct?



- Student A – There is no change in the water level.
- Student B – Water level has decreased due to evaporation.
- Student C – Water level has increased because of absorption of water by the roots.
- Student D – Water level has decreased because of absorption of water by the roots.

Q.2 Name the following.

- The protective double layered membrane of the heart. (5)
- Elongated dead cells with tapering ends present in xylem tissue.
- Asexual reproduction seen in *Spirogyra*.
- Natural pacemaker of the heart.
- The cell mass formed after the growth and division of cells during tissue culture.

Q.3 Match the following. (Write the correct pair in words)

Column A	Column B
i) Heart attack	a) Heart suddenly stops pumping blood around the body
ii) Cardiac arrest	b) Blood flows through blood vessels with a greater force
iii) Palpitations	c) A sudden interruption of blood supply to the heart
iv) Hypertension	d) Wall of the arteries thicken due to fat deposition
v) Coronary artery disease	e) Heart beating too slowly
	f) Heart beating too fast

Q.4 State whether true or false, if false correct the underlined word and (5) rewrite the statement:

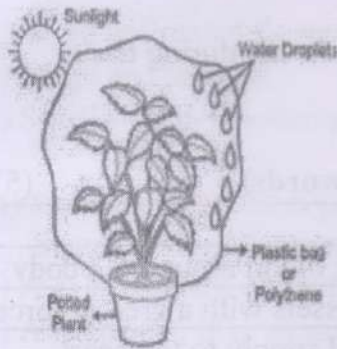
- Conduction of food in plant cells requires expenditure of energy.
- The third whorl of a bisexual flower consisting male reproductive parts is called as Androecium.
- Transpiration is reduced if the air is dry.
- Person with blood group O is called a universal recipient.
- Onion is an example of vegetative reproduction by root.

- Q.5 Write the function of the following: (Write Any one function) (5)**
 for each
- i) Tri-cuspid valve.
 - ii) Sieve plates.
 - iii) Calyx.
 - iv) Stigma.
 - v) Superior vena cava.

- Q.6 Complete the following correlation: (write only answers) (5)**
- i) Bacteria : Binary fission :: Yeast : _____.
 - ii) Flower with only male reproductive parts: staminate:: Flower with female reproductive parts: _____.
 - iii) Ovules: Seeds :: Ovary : _____.
 - iv) Maize : Wind pollination :: Lotus : _____.
 - v) Phloem fibres: Mechanical strength :: Phloem parenchyma : _____.

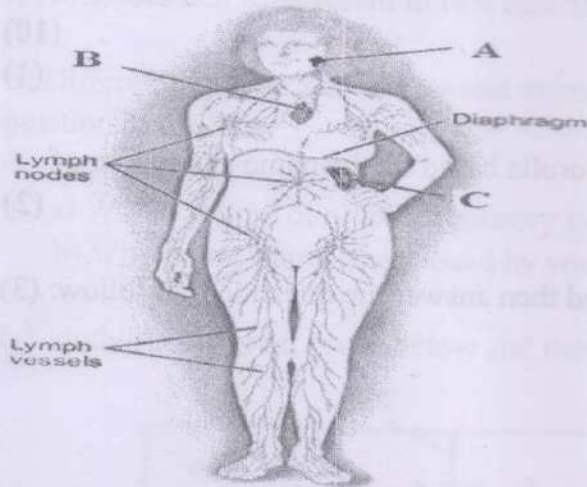
SECTION B

- Q.7 Answer the following: (10)**
- i) Give reason – Ventricles have thicker walls as compared to auricles. (1)
 - ii) Study the experimental set up given below and then answer the question that follow: (2)



- a) Define the phenomenon shown in the above picture.
- b) Explain importance of above phenomenon mentioned by you in a. (any one)
- iii) How does pollination occur in aquatic plants? (2)
- iv) Write two benefits of plant tissue culture technique. (2)

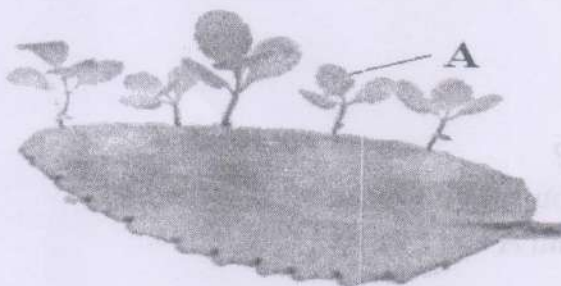
v) The lymphatic system is shown in the following diagram, Study the diagram and answer the question that follow: (3)



- a) Label lymphatic organs A and C.
- b) Give reason- We often experience painful swellings in the axils of our arms when we get a boil or injury in the limbs.

Q.8 Answer the following:

- i) Differentiate between lymph and blood based on their cellular composition. (10)
- ii) How do chest compressions and mouth-to-mouth resuscitation increase the chances of survival of a person showing symptoms of heart attack or cardiac arrest? (1)
- iii) What is ascent of sap? Name any one force which contributes in ascent of sap. (2)
- iv) Give reasons- (2)
 - a) Wind pollinated flowers have long anthers.
 - b) Wind pollinated flowers produce a large quantity of pollen grains.
- v) Study the picture given below and then answer the question that follow: (3)



- a) Identify the leaf shown in the above picture.

- b) Label part A.
 c) How does this plant reproduce?

Q.9 Answer the following:

(10)

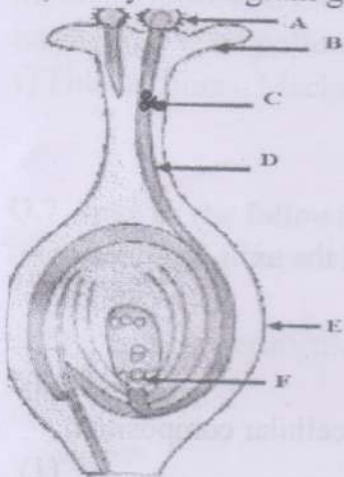
i) Define: Propagule.

(1)

ii) Differentiate between Calyx and Corolla based on the name and colour of their constituents.

(2)

iii) Study the diagram given below and then answer the question that follow: (3)

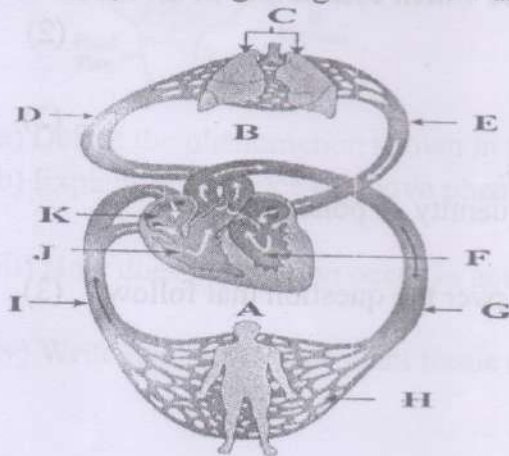


a) Define the process shown in the above diagram.

b) Write the function of D.

c) Label C.

iv) Study the diagram given below and then answer the question that follow: (4)



a) What is depicted in the above diagram?

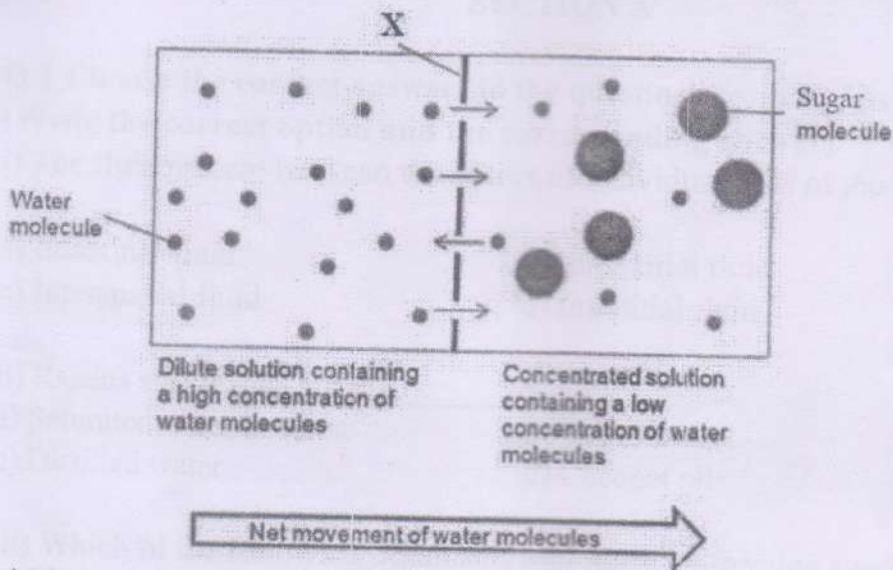
b) Why the above name (mentioned by you in a) is given to this process?

c) There are two parts in the above diagram A and B, Label these parts.

Q.10 Answer the following:

(10)

- i) How does cell sap present in root hair helps in absorption of water? (1)
- ii) Differentiate between arteries and veins based on direction of blood flow and position in the body (2)
- iii) a) Which is type of blood circulatory system is present in insects? (2)
b) Why is this name (mentioned by you in a) is given to this system?
- iv) Study the diagram given below and then answer the question that follow: (2)



- a) Name the process shown in the above diagram.
b) Label X.

v) Draw a neat labelled diagram of a root hair. (Label any four parts) (3)
