

# TEST PAPER: BIOLOGY

Time: 70 Minutes

Class: I.C.S.E. 8

Max. Marks: 50 Marks Date: 25<sup>th</sup> July 2018

**Marking Scheme:** All questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

## Question 1:

### A. Define.

1. Root pressure.
2. Zygote.
3. Fertilization.

### B. Differentiate (2 differences each).

1. Sepals & petals.
2. Transpiration & translocation.
3. Sperm & ovum.

### C. Explain with reason, whether the rate of transpiration will increase or decrease on these days.

1. A cloudy & humid day.
2. A day with bright sunlight.
3. A hot summer day.
4. A wind & dry day.

## Question 2:

### A. Fill in the blanks.

1. \_\_\_\_\_ & \_\_\_\_\_ are the gametes responsible for reproduction in human beings.
2. In grafting, the receiving shoot is called \_\_\_\_\_ & the fixed shoot is called \_\_\_\_\_.
3. The phloem \_\_\_\_\_ are the dead sclerenchyma cells.
4. Process of formation of gametes is called \_\_\_\_\_.

### B. Answer the following.

1. What are micro & macro nutrients?
2. Give two examples for each of the above.
3. Name two nutrients that cause yellowing of leaves.

### C. Describe.

1. Metamorphosis.
2. Any two properties of roots that help it to absorb water efficiently.

## Question 3:

### A. Correct & rewrite these sentences.

1. Semi permeability of the cell wall of root cells helps in osmosis.
2. Semen is the mixture of secretions of prostate & sweat glands.
3. Pollen grains are stored in sporangium.
4. Xylem fibers are the only living cells in the xylem tissue.
5. Pollination results in bud formation.
6. Water pollinated flowers produce a large quantity of pollens.

### B. Give reason.

1. Testes are contained in hanging sacs outside the body.
2. Transpiration is important for ascent of sap.
3. The grafted points of a rose plant are bound with tape & covered with wax.

### C. Describe.

1. Two functions of ovary.
2. Two disadvantages of vegetative reproduction.

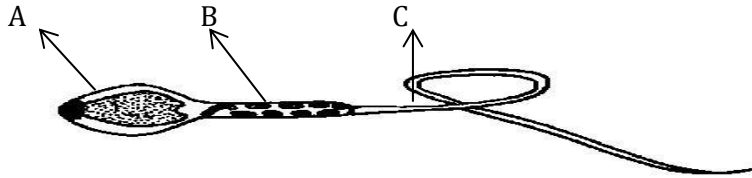
#### Question 4.

##### A. Name the following.

1. Long, narrow, thin tube of an androecium.
2. Disc like upper end of a pistil.
3. Broad sac-like bilobed structure of a stamen.
4. Pollen grains are produced in this part of an androecium.
5. Leaf like structures of calyx.
6. Plant structure that helps in counting the age of trees.

##### B. Answer the following.

1. Why a farmer prefers to grow certain plants/trees vegetatively?
2. What is this cell called? Name A, B, C also name the part of the body that stores it till its maturation.



##### C. Answer the following questions:

###### 1. Give the way of reproduction for each of these.

- a. Bryophyllum.
- b. Amoeba.
- c. Planeria.
- d. Asparagus.

###### 2. Name the agents of pollination for each of these plants.

- a. Vallisneria.
- b. Palm.
- c. Marigold.
- d. Maize.

#### Question 5:

##### A. Select the correct option.

1. Transpiration occurs mostly through \_\_\_\_\_ of the leaves.  
a. Cuticle                      b. Stomata                      c. veins
2. Fertilization in human beings takes place in \_\_\_\_\_.  
a. Ovary                      b. Uterus                      c. Fallopian tubes.
3. \_\_\_\_\_ & \_\_\_\_\_ are the two cells of xylem that give mechanical support to plants.  
a. Tracheid & vessels                      b. Tracheid & fibers                      c. Fibers & vessels.
4. \_\_\_\_\_ & \_\_\_\_\_ are the two female hormones.  
a. Estrogen & progesterone                      b. Estrogen & testosterone                      c. Progesterone & testosterone

##### B. Describe the following with an example each.

1. Fragmentation/regeneration.
2. Spore formation.

##### C. Describe the structure & function of the different types of cells of phloem.