

# TEST PAPER: BIOLOGY

**Time: 70 Minutes**

**Class: I.C.S.E. 10**

**Max. Marks: 50 Marks**

**Date: 25<sup>th</sup> July 2018**

**Marking Scheme:** All questions carry 10 marks each. Subparts (A) and (B) carry 3 marks each and subpart (C) carries 4 marks.

## Question 1:

### A. Give reason.

1. It is better to transplant seedlings in a flower bed in the evening than in the morning.
2. Though the lions, tigers & cats have same number of chromosomes their appearances are different.
3. The brain & the spinal cord are called the central nervous system.

### B. Define.

1. Root pressure.
2. Hormone.
3. Reflex action.

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

1. Medulla oblongata & cerebellum.
2. Simple & exophthalmic goiter.
3. RNA & DNA.
4. Turgidity & flaccidity.

## Question 2.

### A. Explain.

1. Conjunctivitis.
2. Cretinism.
3. Guttation.

### B. Fill in the blanks with proper words/phrases.

1. Osmosis & diffusion are same except that osmosis is \_\_\_\_\_.
2. Parasympathetic nervous system is concerned with re-establishing \_\_\_\_\_.
3. Most feedback mechanisms of our body are \_\_\_\_\_.

### C. Name the following.

1. Pigments present in rods & cones.
2. Two substances that make the fibers of chromatin material.
3. Two main categories of chromosomes.

## Question 3.

### A. Give examples.

1. A positive feedback system of human body.
2. Two common reflexes.
3. Secretions from posterior pituitary.

### B. Explain the terms.

1. After image.
2. Disorder caused by hypo secretion of ADH.
3. Karyotype.

### C. Explain four purposes for which water is essential for plants.

#### Question 4.

##### A. Explain the difference between-

1. Genotype & phenotype.
2. Homozygous & heterozygous conditions.
3. Mitosis & meiosis.

##### B. Answer the following.

1. Can a cell cycle go endlessly?
2. What changes take place during telophase?
3. What is cross joining?

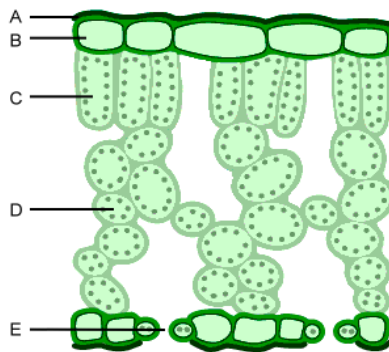
##### C. Explain the genotype & phenotype of progeny of the following using a punnett square.

1. F1 generation - A cross between pea plants that have 'Inflated & constricted' pod shape.
2. F2 generation - A self-pollinated cross in one of the above progeny.

#### Question 5.

##### A. Refer to the figure given below. Answer the following questions

1. Name the structures A, B, C, D, E.
2. Does part A allow water to transpire?
3. Give two functions of part E.



##### B. Name different kinds of transpirations & describe how stomatal transpiration occurs..

##### C. What is the difference between the two main phases of photosynthesis? Give complete account of the steps involved in the first phase.

OR

#### Question 5.

##### A. Explain these terms.

1. Endothelium.
2. SA node.
3. Myocardial infarction.

##### B. What is double circulation? Explain the differences between them.

##### C. Answer according to the diagram.

1. Label the parts.
2. Name the valves that pump blood into the vessels from ventricles.
3. What happens when 1 & 3 contracts?
4. Give the technical term for this contraction.

