

**Delhi Public School Jammu**  
**Assignment**  
**Cycle Test-II (2019-2020)**

**Class: XI**

**Subject: Biology**

**Section A**

**Q1:** Chlorophyll a and chlorophyll b occurs in

- |                  |                       |
|------------------|-----------------------|
| a) Chlorophyceae | b) Rhodophyceae       |
| c) Both a and b. | d) None of the above. |

**Q2:** Segmentation is present in

- |                  |                       |
|------------------|-----------------------|
| a) Porifera      | c) Annelida           |
| b) Both a and b. | d) None of the above. |

**Q3:** In Epigynous flowers, the ovary is

- |                  |                      |
|------------------|----------------------|
| a) Half superior | b) Inferior          |
| c) Superior      | d) None of the above |

**Q4:** Presence of vessels, tracheids and fibres is feature of

- |          |               |
|----------|---------------|
| a) Xylem | c) Phloem     |
| b) Root  | d) parenchyma |

**Q5:** Which is the type of dense connective tissue

- |                       |                 |
|-----------------------|-----------------|
| a) Plasma             | b) Blood cells  |
| c) Bone and Cartilage | d) Both a and b |

Or

Which is the type of muscular tissue.

- |                 |                       |
|-----------------|-----------------------|
| a) Striated     | c) Unstriated         |
| b) Both a and c | d) None of the above. |

**Section B**

**Q6:** List four important features of Eubacteria

Or

List important features of kingdom protista.

**Q7:** Explain taxonomical hierarchy by taking any example.

**Q8:** Draw a well labeled diagram of any one euglenoid.

**Q9:** Explain fluid mosaic model of plasma membrane

Or

List some important functions of cell wall and lysosomes.

**Q10:** Define enzyme. Explain the mechanism for enzyme activity.

**Q11:** Explain various stage of mitosis.

**Q12:** What is the significance of vacuole and microbodies in plants?

**Section C**

**Q13:** What do you mean by prothallus and protonema stages in plants? Explain life cycle of any one pteridophyta.

**Q14a)** Differentiate between vertebrates and non invertebrates.

- b) List some important features of Echinodermata.

Or

List some features of mammals. List some adaptations that help birds to fly.

**Q15:** Explain various types of roots. List four modifications of leaves in plants.

**Q16:** Draw a well labelled diagram of T.S. of Dicot root.

Or

Explain secondary growth in dicot root.

**Q17:** Explain with the help of diagram the digestive system of cockroach.

#### **Section D**

**Q18:** Nucleic acids comprises of both DNA and RNA. These two differ from one another DNA helps in heredity while as RNA help in protein synthesis.

a) Give the full form of DNA and RNA.

b) Mention any two main differences between DNA and RNA.

c) What do you mean by nucleotides and nucleotides?

**Q19:** Meiosis is reductional division and it involves meiosis I and Meiosis II. After meiosis four daughter cells are formed. During meiosis crossing over and genetyic recombination takes place, which leads to variations.

i) Which division among meiosis is reductional and why?

ii) What do you mean by crossing over?

What is the significance of crossing over?

Or

Cytokinesis in animals occurs by the formation of the cell furrow. At the time of the cytokinesis the daughter cells are formed. In some organism karyokinesis is not followed by cytokinesis and result in the formation of syncytium.

i) What do you mean by syncytium?

ii) Explain cytokinesis in animals.

iii) Differentiate between cytokinesis in plants and animals.

#### **Section E**

**Q20a:** Define osmosis and facilitate diffusion.

b) Design an experiment to show both endosmosis and exosmosis.

c) List importance of osmosis in plants.

Or

a) What do you mean by diffusion pressure deficit?

b) When does wilting occur in plants? Mention any two ways of absorption of water in plants.

c) Comment on the statement “transpiration is necessary evil.”

**Q21a:** Define mineral nutrition. What criteria are used to determine the essentiality of a nutrient?

b) List some importances and deficiency symptoms of Magnesium, Zinc and copper.

Or

a) Explain nitrogen cycle in detail.

b) What do you mean by infectious thread during nitrogen fixation?

c) Explain the fate of ammonia in plants.