

## BOTANY - XII

*(Note- All these questions are from work sheet. Complete all given questions in the work sheet taking help of your text book. Do not leave any question unanswered.)*

### Unit Anatomy

#### A. Very Short Questions:

1. Define cambium.
2. What is open vascular bundle?
3. Define lenticel.
4. What is periderm?
5. Define heart wood.
6. Define dendrochronology.
7. Write down the elements of xylem and phloem.
8. Write one function of sclereid.

#### B. Long Questions:

1. What is secondary growth? Describe the process of secondary growth in dicot stem.
2. Describe the anatomical features of dicot root and show its differences with monocot root.
3. Describe the anatomical features of monocot root and show its differences with dicot root.
4. Describe the anatomical features of dicot stem and show its difference with monocot stem.
5. Describe the internal structures of monocot stem and compare with dicot stem.

### Unit Physiology

#### A. Very short questions

1. What is diffusion?
2. Define diffusion pressure.
3. Define DPD.
4. Define turgor pressure.
5. What is endosmosis?
6. Define plasmolysis.
7. Define incipient plasmolysis.
8. Define hydathode.
9. What is semi permeable membrane?
10. Name the tissue through which ascent of sap takes place.
11. Define imbibition.
12. What happens when a cell is placed in hypotonic solutions?
13. Define guttation.

#### B. Long Questions:

1. Define symplast. Describe the mechanism of absorption of water in detail.
2. Define ascent of sap. Describe the mechanism of ascent of sap.
3. Define transpiration. Describe the mechanism of transpiration.