

Anatomy of Flowering Plants



TRY YOURSELF

ANSWERS

1. Differences between collateral and bicollateral vascular bundles:

S. No.	Collateral bundle	Bicollateral bundle
(i)	It contains a single patch of phloem.	There are two patches of phloem.
(ii)	Phloem lies towards the outer side and xylem towards the inner side.	Phloem occurs both on the outer side as well as on the inner side. Xylem occupies the central position.
(iii)	If open, a collateral bundle contains a single strip of cambium.	A bicollateral bundle is often open. It contains two strips of cambium, outer and inner.

2. Medullary rays are non-vascular areas which occur between vascular bundles in dicot stem for lateral conduction.

3. When the vascular bundle lacks cambium, it is referred to as closed.

4. (i) Tetrarch xylem – *Helianthus*

(ii) Triarch xylem – *Pisum*

5. In dicot leaves, the size of the vascular bundles are dependent on the size of veins.

6. Vascular bundles of monocot stem are conjoint, collateral and endarch while the vascular bundles of monocot root are radial and exarch.

