1. In dicot plants, the primary root develops from which part of the embryo?
   A. Plumule
   B. Radicle
   C. Cotyledon
   D. Node (B)

Explanation : In dicotyledonous plants, the primary root forms by elongation of the radicle.

2. Which root system is formed by the primary root and its branches?
   A. Fibrous root system
   B. Adventitious root system
   C. Tap root system
   D. Prop root system (C)

Explanation : The primary root along with secondary and tertiary roots forms the tap root system.

3. Fibrous root system is commonly found in:
   A. Mustard B. Wheat
   C. Banyan D. Rose (B)

Explanation : In monocot plants like wheat, the primary root is short-lived and is replaced by fibrous roots.

4. Roots arising from parts other than the radicle are called:
   A. Tap roots
   B. Lateral roots
   C. Adventitious roots
   D. Primary roots (C)

Explanation : Adventitious roots arise from any plant part other than the radicle.

5. The root cap mainly helps in:
   A. Absorbing sunlight
   B. Protecting the tender root apex
   C. Producing flowers
   D. Making food (B)

Explanation : The root cap protects the delicate root tip while it pushes through soil.

6. Which region of root contains continuously dividing cells?
   A. Region of maturation
   B. Region of elongation
   C. Region of meristematic activity
   D. Root hair region (C)

Explanation : The meristematic region has small, thin-walled cells with dense protoplasm that divide continuously.

7. Root hairs are mainly found in the:
   A. Root cap
   B. Region of maturation
   C. Region of elongation
   D. Stem node (B)

Explanation : Root hairs develop in the maturation region and absorb water and minerals.

8. The stem develops from:
   A. Radicle
   B. Plumule
   C. Root cap
   D. Seed coat (B)

Explanation : The stem develops from the plumule of the embryo during seed germination.

9. The region of stem from where leaves arise is called:
   A. Internode B. Node
   C. Petiole D. Root hair (B)

Explanation : Leaves arise from nodes on the stem.

10. In the young stage, the stem is generally:
    A. Woody and dark brown
    B. Green
    C. Fibrous
    D. Root-like (B)

Explanation : Young stems are usually green, while mature stems may become woody and dark brown.