

1. What is meant by modification of root? What type of modification of root is found in the:  
(a) Banyan tree (b) Turnip (c) Mangrove trees
2. Justify the following statements on the basis of external features:  
(i) Underground parts of a plant are not always roots.  
(ii) Flower is a modified shoot.
3. How is a pinnately compound leaf different from a palmately compound leaf?
- \*4. Explain with suitable examples the different types of phyllotaxy.
- \*5. Define the following terms:  
(a) aestivation (b) placentation (c) actinomorphic  
(d) zygomorphic (e) superior ovary (f) perigynous flower  
(g) epipetalous stamen
- \*6. Differentiate between  
(a) Racemose and cymose inflorescence  
(b) Fibrous root and adventitious root  
(c) Apocarpous and syncarpous ovary
- \*7. Draw the labelled diagram of the following:  
(i) gram seed (ii) V.S. of maize seed
- \*8. Describe modifications of stem with suitable examples.
9. Take one flower each of the families Fabaceae and Solanaceae and write its semi-technical description. Also draw their floral diagram after studying them.
- \*10. Describe the various types of placentations found in flowering plants.
- \*11. What is a flower? Describe the parts of a typical angiosperm flower.
- \*12. How do the various leaf modifications help plants?
- \*13. Define the term inflorescence. Explain the basis for the different types of inflorescence in flowering plants.
14. Write the floral formula of a actinomorphic, bisexual, hypogynous flower with five united sepals, five free petals, five free stamens and two united carpels with superior ovary and axile placentation.
15. Describe the arrangement of floral members in relation to their insertion on thalamus.