

Class: 11
Subject: Biology
Topic: Anatomy of flowering plants
No. of Questions: 20

- Q1. Cork cambium forms tissues that form the cork. Do you agree with this statement? Explain.
- Q2. Indicate the location of cambium in a dicot stem.
- Q3. Cut a transverse section of young stem of a plant from your school garden and observe it under the microscope. How would you ascertain whether it is a monocot stem or a dicot stem? Give reasons.
- Q4. Name the three basic tissue systems in the flowering plants. Give the tissue names under each system.
- Q5. When do you refer to a vascular bundle as a closed bundle?
- Q6. Why is cambium considered to be a lateral meristem?
- Q7. Which one out of root or stem shows endarch arrangement of xylem? What is meant by endarch arrangement?
- Q8. Where are companion cells located in flowering plants? What is their function?
- Q9. What is an annual ring?
- Q10. Name a plant organ where endodermis is absent. Give one basic difference between endodermis and epidermis.

- Q11. Below is a list of plant fibers. From which part of the plant these are obtained
- Coir
 - Hemp
 - Cotton
 - Jute
- Q12. What do you mean by leptocentric and hadrocentric vascular bundle? Cite examples.
- Q13. What are medullary rays and what are their functions?
- Q14. Why there is secondary growth in dicots and no such growth in monocots?
- Q16. (a) What are casparian strips and what is their function?
(b) Define concentric vascular bundle. What are their types?
(c) What is wood botanically?
- Q16. What will you observe in a transverse section of a trunk to estimate the age of the tree?
- Q17. Grandfather used to prune the tips of hedge plant in his garden. Harish asked him the reason for doing so. Grandfather answered that it induces profuse growth of lateral branches thereby making hedge denser.
Read the above passage and answer the following questions:
- Which plant tissue is removed during trimming of tips of hedge plant?
 - How many times of meristems are found in plants?
 - Why did Harish ask his grandfather about the reason of his act?
- Q18. Sanjeev went to buy clothes with his father and preferred cotton clothes. Father asked him about the source of cotton fibers. He answered that it is obtained from hair-like structures present on the seeds of cotton.
Read the above passage and answer the following questions:
- Cotton fibers represent which cells? Name two other fiber yielding plants.
 - What value is displayed by father?
- Q19. Mother went to the market to buy fruits and bought apples and naashpati (Pyrus). Ravi did not like naashpati as it was very hard in comparison to apples, but his mother insisted that he should eat naashpati also as it contained the calcium for the growth of the body.
Read the above passage and answer the following questions:

- (a) What is the reason for the difference in the softness in apple and naashpati fruits?
- (b) What are sclereids?
- (c) Why did mother want Ravi to eat naashpaati?

Q20. Maninder went to kerala to visit his friend Nair. In the evening, he went for a walk and saw coconut trees everywhere. Nair told him that this tree is very important for them as they get huge benefits from this plant.

Read the above passage and answer the following questions:

- (a) Which part of this plant is the source of coir fibers? What is the morphological nature of coir fibers?
- (b) Give at least two other benefits of coconut trees.
- (c) How did Maninder derive benefit from his visit to Kerala?

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