



10:33 PM

THURSDAY, 28 SEP

India

LONGITUDE 72.436081 72°26'9.891"E

LATITUDE 23.034674 23°2'4.826"N





11:10 AM
MONDAY, 13 FEB

India
LONGITUDE 72.436081 72°26'9.891"E
LATITUDE 23.034674 23°2'4.826"N



ROOT FORMATION

What do you see? A cross-section of a root. The white central structure is the pith, surrounded by the cortex, endodermis, and vascular cylinder. The vascular cylinder contains xylem and phloem. The root cap is at the tip, protecting the meristematic tissue.

1. The root cap is a protective layer of cells at the tip of the root. It is composed of several layers of cells. The outermost layer is the root cap proper, which is made up of cells that are constantly dividing. This division produces new cells that replace the cells that are lost as the root grows through the soil.

2. The vascular cylinder is the central part of the root. It is composed of several layers of cells. The outermost layer is the endodermis, which is a single layer of cells that surrounds the vascular cylinder. The innermost layer is the pith, which is made up of several layers of cells. Between the endodermis and the pith are the vascular bundles, which are composed of xylem and phloem.

3. The xylem is the tissue that transports water and minerals from the roots to the rest of the plant. It is located in the center of the vascular bundles. The phloem is the tissue that transports organic nutrients from the leaves to the rest of the plant. It is located on the outside of the vascular bundles.

4. The cambium is a layer of cells that is located between the xylem and the phloem. It is responsible for the secondary growth of the root, which produces the vascular cambium and the cork cambium.

5. The vascular cambium is a layer of cells that is located between the xylem and the phloem. It is responsible for the secondary growth of the root, which produces the vascular cambium and the cork cambium.

6. The cork cambium is a layer of cells that is located between the vascular cambium and the cortex. It is responsible for the secondary growth of the root, which produces the vascular cambium and the cork cambium.

7. The cortex is the outermost layer of cells in the root. It is composed of several layers of cells. The outermost layer is the epidermis, which is a single layer of cells. The inner layers are the cortex proper, which is made up of several layers of cells.

8. The epidermis is the outermost layer of cells in the root. It is composed of several layers of cells. The outermost layer is the epidermis proper, which is a single layer of cells. The inner layers are the epidermis proper, which is made up of several layers of cells.

9. The endodermis is a single layer of cells that surrounds the vascular cylinder. It is responsible for the secondary growth of the root, which produces the vascular cambium and the cork cambium.

10. The vascular bundles are the central part of the root. They are composed of xylem and phloem. The xylem is located in the center of the vascular bundles, and the phloem is located on the outside.

11. The pith is the central part of the root. It is composed of several layers of cells. The outermost layer is the pith proper, which is a single layer of cells. The inner layers are the pith proper, which is made up of several layers of cells.

12. The root cap is the tip of the root. It is composed of several layers of cells. The outermost layer is the root cap proper, which is a single layer of cells. The inner layers are the root cap proper, which is made up of several layers of cells.

By: Sant A. Sharma
Bhambha G. Sharma

Symmetric Cells

The cell division process that produces two daughter cells that are identical to the parent cell.

Asymmetric Cell

The cell division process that produces two daughter cells that are not identical to the parent cell.

Angular Cells

The cell division process that produces two daughter cells that are not identical to the parent cell.

Epithelial Cell

The cell division process that produces two daughter cells that are not identical to the parent cell.

Collagen Cells

The cell division process that produces two daughter cells that are not identical to the parent cell.

By: Sant A. Sharma, Sant A. Sharma
Guided by: Department of Pathology & Microbiology

1:10 AM
MONDAY, 13 FEB

India
LONGITUDE 72.436081 72°26'9.89
LATITUDE 23.034674 23°2'4.82



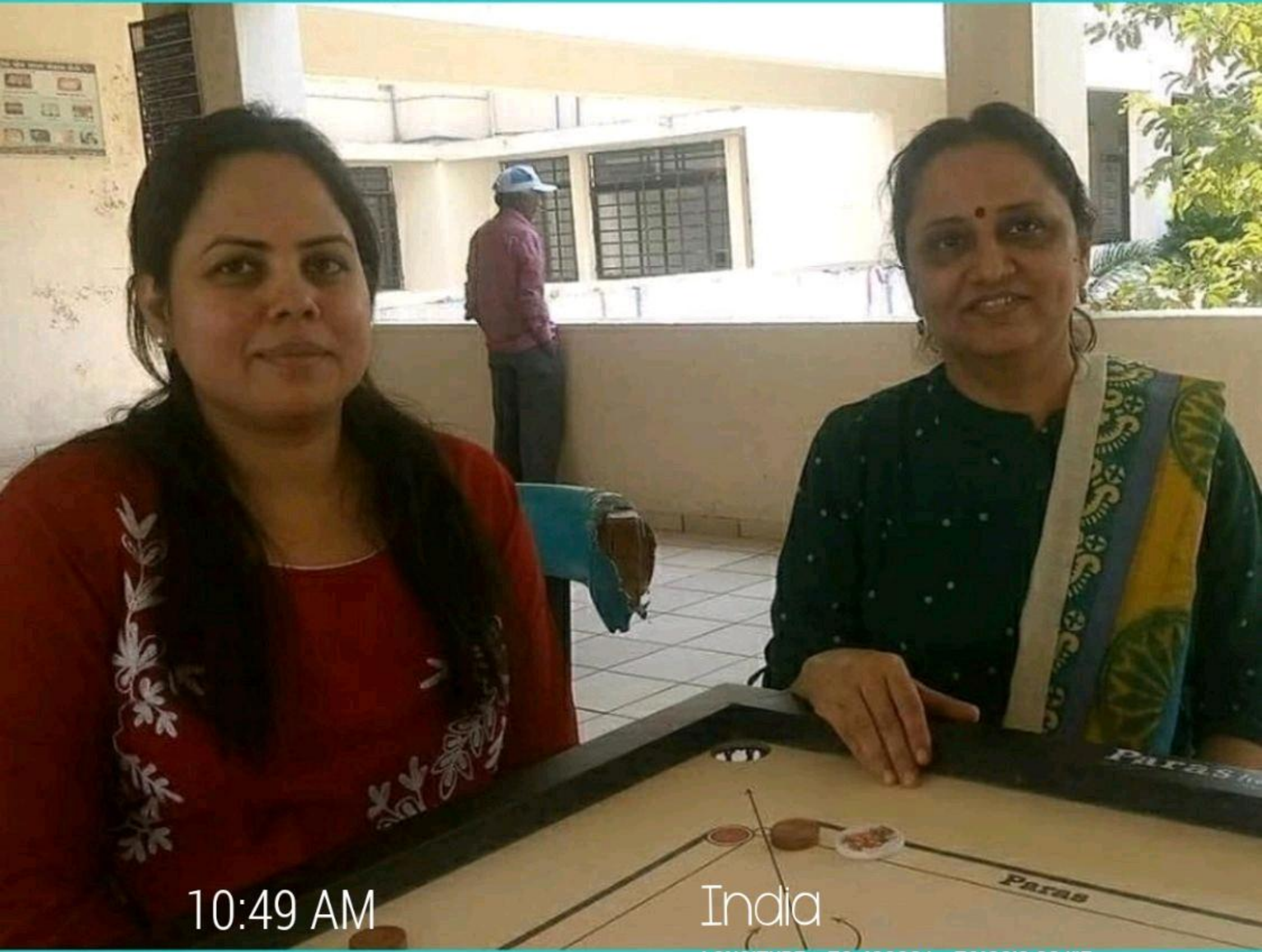
10:49 AM

WEDNESDAY, 17 FEB

India

LONGITUDE 72.436081 72°26'9.891"E

LATITUDE 23.034674 23°2'4.826"N



10:49 AM

WEDNESDAY, 14 FEB

India

LONGITUDE 72.436081 72°26'9.891"E
LATITUDE 23.034674 23°2'4.826"N



11:58 AM

WEDNESDAY, 13 FEB

India

LONGITUDE 72.436081 72.260891"E

LATITUDE 23.034674 23.24320"N



AM
WEDNESDAY, 13 FEB

India
LONGITUDE 72.436081 72°26'9.891"E
LATITUDE 23.034674 23°2'4.826"N

