ARTIFICIAL VEGETATIVE PROPAGATION

Vegetative propagation can also be done artificially and the man-made methods for vegetative propagation are called artificial methods of ve4getative propagation. They include:

- **Cuttings:** In this method, a small piece of any plant organ (stem, root or leaf) is used for propagation, e.g., leaves (Bryophyllum), roots (tamarind), stems (sugarcane, grapes, rose and Bougainvillea).
- **Layering:** In this method, roots are artificially induced on the stem branches before they are detached from the parent plant, e.g., jasmine, grapevine, litchi, orange, etc.
- **Grafting:** In this method, parts of the two plants are joined in such a way that they grow as one plant. The rooted supporting portion of one plant called **stock**, e.g. rose, apple, plum, peach, mango, etc.
- **Micropropagation:** This method includes propagation of plants by culturing the cells, tissues and organs in laboratory which is called **tissue culture**. Initially, this forms an undifferentiated mass of cells called **callus**. Later on , this callus differentiates to produce many small plantlets.