

### **SNS COLLEGE OF ENGINEERING**

Kurumbapalayam (Po), Coimbatore - 641 107

#### **An Autonomous Institution**

Accredited by NBA - AICTE and Accredited by NAAC - UGC with 'A' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

#### **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING-IOT Including CS&BCT**

COURSE NAME : 19CS307- DATA STRUCTURES

II YEAR / III SEMESTER

Unit IV- NON LINEAR DATA STRUCTURES - GRAPH







## **TOPIC: Bi-Connectivity**





Cont.

- An undirected graph is called Biconnected if there are two vertex-disjoint paths between any two vertices
- In a Biconnected Graph, there is a simple cycle through any two vertices.
  By convention, two nodes connected by an edge form a biconnected graph, but this does not verify the above properties. For a graph with more than two vertices, the above properties must be there for it to be Biconnected.





Cont.

- A connected graph is Biconnected if it is connected and doesn't have any <u>Articulation</u> <u>Point</u>. We mainly need to check two things in a graph.
  - 1) The graph is connected.
  - 2) There is not articulation point in graph.

















# Thank you