

Graph

Node

Edge

Path

Cycle

Connected

Weighted

Spanning Tree

Minimum Spanning Tree

A point or vertex in a graph, representing an object or location

A mathematical model consisting of nodes (vertices) connected by edges (lines)

A sequence of connected edges in a graph

A line in a graph, representing a connection or relationship between nodes

When there is a path between every pair of nodes in a graph

A path in a graph that starts and ends at the same node

A subgraph of a connected graph that includes all the nodes and some of the edges, forming a tree structure

When edges in a graph have numerical values or weights assigned to them

The spanning tree with the minimum total weight of its edges in a weighted graph