A graph

consists of nodes or vertices connected by arcs or edges.

A spanning tree

is a subgraph that connects all nodes/vertices in the graph

A subgraph

is part of a graph.

A weighted graph

is a connected graph with no cycles.

A tree

connected graph, X and Y where X and Y are a partition of V and every edge in E has one endpoint in X and one endpoint in Y.

A bipartite graph

is a tree of minimum weight.

A minimum spanning tree

has values associated with each edge. It's weight, for example, could be the distance.

A digraph

is a graph with directed edges.

The degree, valency or order of a node/vertex

is the number of arcs/edges incident to it.

A Path

A complete graph

is a graph with no loops and not more than one edge connecting any pair of vertices/nodes.

A simple graph

is a graph where all nodes/vertices are connected. This is different to a complete graph.

A connected graph

there is a arc/edge connecting them.

Two vertices are said to be connected if

A circuit or cycle

is a closed path within a graph.

A walk

is a route that allows an node/vertex to be visited more than once.

is a graph where every vertex/node is connected to every other node/vertex. If the graph has vertices/nodes then the graph is complete.

is a finite sequence of edges/vertices that directly connected and the graph has vertices/nodes. Vertex may repeat. The end vertex of one edge is the start of the next.

A loop is an arc /edge

that starts and finishes at the same vertex/node.

An adjacency matrix

is a table showing the number of direct ties between each node/vertex.

A distance matrix

is a table showing the weights of each edge/arc. Zero values are denoted by '–'.

An isomorphic graph

is a graph showing the same information but drawn differently.

A complete bipartite graph

"Source: http://en.wikipedia.org/wiki/Complete_bipartite_graph#Complete_bipartite_graphs_with_n_vertices"