

Lalbaba College

MTMG

Internal Assessment - 2021

Semester - V

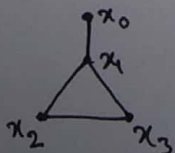
Paper - DSE

Time - 30 minutes

Full Marks - 10 (10x1).

• Answer the following questions:

1. A graph is a collection of _____
(A) Row and Columns (B) Vertices and edges (C) Equations (D) None of these
2. If the origin and terminus of a walk are same, the walk is known as _____
(A) open (B) closed (C) path (D) None of these
3. The maximum degree of any vertex in a simple graph with n vertices is
(A) $n-1$ (B) $n+1$ (C) $2n-1$ (D) n
4. Maximum number of edges in a n -node undirected graph without self-loop is
(A) n^2 (B) $\frac{n(n-1)}{2}$ (C) $n-1$ (D) $\frac{n(n+1)}{2}$
5. If in a graph multiple edges between the same set of vertices are allowed, it is called _____
(A) Hamiltonian graphs (B) Simple graph (C) Multi graph (D) Euler graph
6. Define Binary Tree
7. Define Spanning Tree
8. Draw the Complete graph K_4 .
9. Define bipartite graph
10. Find the degree of the vertex x_1 of the given graph



- (A) 2 (B) 1 (C) 3 (D) 4