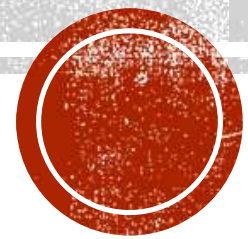
MATHS DEFINATION



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- Symmetric matrix:- A matrix whose transpose is equal to the matrix it self its called Symmetric matrix.
- Skew Symmetric matrix:- A matrix is a square matrix that is equal to the negative of its transpose matrix its called Skew Symmetric matrix.
- Diagonal matrix:- Diagonal elements are non zero and other elements are zero is called Diagonal matrix.
- Scalar matrix:- A matrix which has all diagonal elements are same and non diagonal elements are zero is called Scaler matrix.
- Boolean matrix:- A matrix where elements are zero or one its called Boolean matrix.
- Null matrix:- A matrix where all elements are zero is called Null matrix.
- Matrix:- A matrix is a collection of number arrange into a fixed number of rows and columns.
- Transpose of matrix:- In this an operator where row converted into column its called transpose of matrix.
- Identity matrix:- diagonal elements are compulsory zero & all other elements are one its called…

- Graph:- set of vertices and edges is known as graph.
- Multigraph:- more than one edge can join two vertices but no edges can join itself(self loop).
- Simple graph:- no self and no parellal graph is called simple graph.
- Indegree:- A number of edges which are incident into node is known as Indegree.
- Outdegree:- A number of edges which are incident from node is known as outdegree.
- Tutology:- A proposition which is true for all truth values Is called tutology.
- Contradiction:- A preposition which is false for all false value is called contradiction.
- Strongly connected:- A direct graph is strongly if there is a path from a to b and from b to a whenever a and b are vertices in the graph.
- Weakly connected:- A direct graph is weakly if there is a path between every two vertices in the underlying undirected graph.
- Tree:- A tree is undirected graph in which any two vertices are connected by exactly one path.
- Binary tree:- It is a tree structure where each node has at most two children.
- Interior node:- Nodes with children are called interior node.

- Leaf node:- Nodes without children its called leaf node.
- Regular graph:- It is a graph where each vertex has the same number of neighbors.
- Complete graph:- It is simple undirected graph in which every pair of distinct vertices is connected by a unique edge.
- Isomorphic Graph:- Two graphs G1 & G2 are said to be isomorphic if there is one to one correspondence between their vertices and between their edges.
- Bipartite graph:- It is graph whose vertices can be divided into two disjoint and independent set U & V , that is some edge connects a vertex in U to one in V.
- Complete bipartite graph:- It is graph whose vertices can be divided into two disjoint and independent set U & V , that is all(every) edge connects a vertex in U to one in V.

- Function:- A function is a rule that assigns each input exactly one output.
- Inverse function:- It is a function that returns the original value for which a function has given that output.

(Note:- examples are compulsory write in exam…)

THANK YOU

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