

S.No	Bloom levels	Question	A	B	C	D	E	Ans
1	analyzing	A loop in a graph is ____.	an edge with no endpoint	an edge with a single endpoint	an edge with two endpoints	None of the above		B
2	analyzing	A simple graph is a graph with	Both Loops and parallel edges	Only loops	Only parallel edges	No loops and parallel edges		D
3	analyzing	In any graph the number of vertices of odd degree is ____.	An even number	An odd number	A Prime number	An Armstrong number		A
4	analyzing	The number of edges of a simple graph with $n$ vertices	$n-1$	$n$ .	$n*(n-1)/2$	$n*(n+1)/2$		C
5	analyzing	A graph has vertices of degrees 0, 2, 2, 3, and 9. How many edges does the graph have?	8	6	9	5		A
6	analyzing	Number of edges in the graph $K_5$	9	11	8	10		D
7	analyzing	The total degree of a graph is defined as ____.	the sum of the of weights of all the edges of the graph	the sum of the degrees of all the vertices of the graph.	the product of the degrees of all the vertices of the graph.	None		B
8	analyzing	A complete bipartite graph on $(m, n)$ vertices is a simple graph whose vertices can be partitioned into two disjoint sets $V_1$ and $V_2$ in such a way that each of the $m$ vertices in $V_1$ is ____ to each of the $n$ vertices in $V_2$ , no vertex in $V_1$ is connected to ____, and no vertex in $V_2$ is connected to ____.	Not connected by an edge; any other vertex in $V_1$ ; any other vertex in $V_2$ .	connected by an edge; any other vertex in $V_2$ ; any other vertex in $V_1$	connected by an edge; any other vertex in $V_1$ ; any other vertex in $V_2$	NONE.		C
9	analyzing	The handshake theorem says that the total degree of a graph is ____.	equal to twice the number of edges of the graph	equal to the number of edges of the complement of the graph	equal to the number of vertices and	All mentioned		A

					edges of the graph			
10	<b>analyzing</b>	A trail from $v$ to $w$ is a walk from $v$ to $w$ that	does not contain a repeated Vertex.	does not contain both repeated Vertex and repeated edge	does not contain a repeated edge.	contains a repeated edge.		C
11	<b>analyzing</b>	Let $G$ be simple, connected graph such that every vertex in $G$ has degree 4. And $ E  = 16$ . Then $ V  =$	9	16	8	12		C
12	<b>analyzing</b>	Which of the following degree sequence is NOT graphic for simple graphs?	$\langle 2, 2, 2, 1, 1 \rangle$	$\langle 4, 2, 2, 2, 2 \rangle$	$\langle 7, 1, 1, 1, 1, 1, 1 \rangle$	$\langle 5, 2, 1, 1, 1, 1 \rangle$		D
13	<b>analyzing</b>	Which of the following statements is correct?	Every path is a trail	Every trail is a path	Every walk is a trail	none		A
14	<b>analyzing</b>	a walk that starts and ends at the same vertex is a	closed walk	double walk	open walk	Pseudo walk		A
15	<b>analyzing</b>	How many edges are there in $K_{8,9}$	17	36	72	24		C
16	<b>analyzing</b>	We use $K_{m,n}$ to represent a ----- graph on $n$ vertices	Cyclic	Complete Bipartite	Kristal's	Complete		B
17	<b>analyzing</b>	Consider vertices $x$ and $y$ , if there is more than one edge joining $x$ and $y$ is a	Master edge	Dashed edge	Loop	Multi edge		D
18	<b>analyzing</b>	A Part of the graph that joins its endpoints is called as	Vertex	degree	Edge	None		C
19	<b>analyzing</b>	An edge that joins a vertex to itself is	Parallel edge	Dashed edge	Multi-edge	None		D
20	<b>analyzing</b>	How many vertices are there in $K_{8,9}$	17	36	72	24		A
21	<b>analyzing</b>	Which of the following is true for an undirected graph?	A. Links(EDGES) are bidirectional	B. Adjacency matrix is symmetric	C. Both (a) and (b)	D. Neither (a) nor (b)		C

22	<b>analyzing</b>	An undirected acyclic graph with 'n' vertices has (n-1) edges. What can you say about it?	It is multigraph	It is disconnected	It is a tree	None of the above		C
23	<b>analyzing</b>	Which of the algorithms is used to find minimum spanning tree of a graph	DFS	Kruskal's algorithm	BFS	None of the mentioned		B
24	<b>analyzing</b>	the number of edges coming out of a Vertex of a graph is defined as	In-degree	Out-degree	Degree	None		B
25	<b>analyzing</b>	If the edges of a graph have directions attached to it then the graph is called as	Acyclic graph	Undirected graph	Digraph	Cyclic graph		C
26	<b>analyzing</b>	How many edges are there in $K_{m,n}$	$m+n$	$m-n$	$m*n$	$m/n$		C
27	<b>analyzing</b>	If the graph $K_m, 12$ has 72 edges then what is 'm'	2	4	8	6		D
28	<b>analyzing</b>	Determine $ V $ for the graph G that has 9 edges such that all vertices have degree 3	6	4	8	9		A
29	<b>analyzing</b>	Determine $ V $ for the graph G that has 10 edges such that 2 vertices have degree 4 and all others of degree 3	12	6	8	17		B
30	<b>analyzing</b>	How many Vertices are there in $K_{m,n}$	$m+n$	$m-n$	$m*n$	$m/n$		A