Assignment 0

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Note: This assignment is for practice and it will not be graded.

1) Which of the following is not a social networking site?
   - Facebook
   - Instagram
   - Twitter
   - Blog
   - No, the answer is incorrect.
   Accepted Answers: Blog

2) Social networking involves communication between _______.
   - Two computers
   - A computer and a router
   - A human and a computer
   - Two or more people
   - No, the answer is incorrect.
   Accepted Answers: Two or more people

3) An internet meme is (choose the best answer)
   - A social networking website
   - A viral video
   - A computer virus
   - Any video of digital content traversing through the internet, be it an image, audio, video or a file in some other format.
   - No, the answer is incorrect.

4) Which of the following is useful in traversing a given graph by breadth first search?
   - List
   - List
   - Graph
   - No, the answer is incorrect.
   Accepted Answers: List

5) What is the maximum number of possible non-zero values in an adjacency matrix of a simple graph with $n$ vertices?
   - $n^2$ - 1
   - $(n^2 - n)/2$
   - $(n^2 - 1)/2$
   - $(n^2 + 1)/2$
   - No, the answer is incorrect.

6) On which of the following statements does the time complexity of checking if an edge exists between two particular vertices or not depends?
   - Depends on the number of edges
   - Depends on the number of vertices
   - Is independent of both the number of edges and vertices
   - No, the answer is incorrect.

7) Which type of graph has all the vertices of the first set connected to all the vertices of the second set?
   - Complete Bipartite
   - Complete Graph
   - Path
   - No, the answer is incorrect.

8) In a complete graph with $n$ nodes, how many different triangles are present?
   - 2n
   - $n^2$
   - $\frac{n^3 - 3n}{2}$
   - None of the above
   - No, the answer is incorrect.

9) In an undirected graph $G$ with $n$ vertices and a edges, the sum of the degrees of each vertex is:
   - $n_a$
   - $2n$
   - $n^2$
   - No, the answer is incorrect.

10) The number of edges in a regular graph of degree $d$ and $n$ vertices is (please use $d$ and $n$ to be even):
    - $d$
    - $n/2$
    - $d/2$
    - No, the answer is incorrect.

Due on 2023-01-27, 23:59 IST.