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| **GE 2318 Homework #2 2024**  **Name: Student ID:**  **Q1:** Consider a connected undirected tree graph of 100 nodes.  (i) The total number of edges in the graph is equal to \_\_\_\_\_\_\_\_  (ii) The total node degree of the graph is equal to: \_\_\_\_\_\_\_\_\_  (iii) The average degree of the graph is equal to: \_\_\_\_\_\_\_\_\_  (iv) The total number of bridges in the graph is equal to: \_\_\_\_\_\_  **Q2:** For the following graph, find its adjacency matrix and incidence matrix .    **Q3:** Solve the Chinese postman problem for the following seven-bridge map, where the edge lengths are: a = 6, b = 8, c = 3, d = 5, e = 9, f = 12, g = 10    (i) Show your optimal solution.  (ii) There are several other possible choices. Show any other choice and compare it to your answer, so as to verify that your answer is better than the other one. |