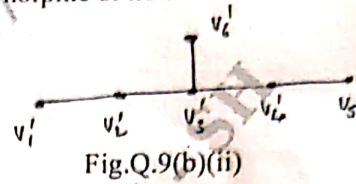
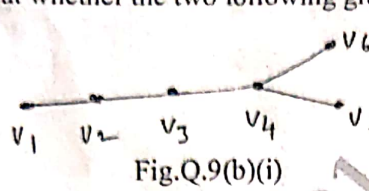
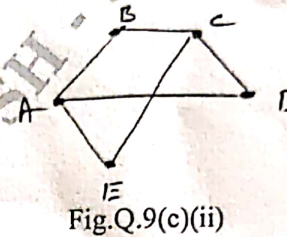
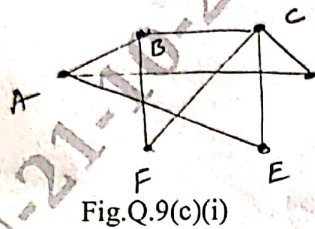


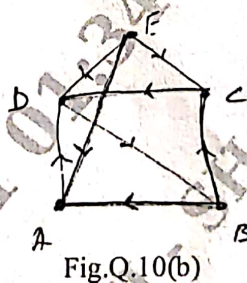
- 9 a. Explain the followings: i) Circuit ii) Euler and Hamiltonian path iii) Konigsberg bridge problem. (06 Marks)
b. Prove that whether the two following graphs are isomorphic or not: (07 Marks)



- c. Determine whether the following graphs given are bipartite or not. (07 Marks)



- 10 a. Define the terms:
i) Regular graph
ii) K-regular graph
iii) Complete graph (06 Marks)
b. Find the in-degree and out-degree of each vertex of each of the following directed graphs. Also verify that the sum of the in-degrees (or the out-degrees) equals the number of edges. (07 Marks)



- c. Determine whether the graphs shown are isomorphic. (07 Marks)

