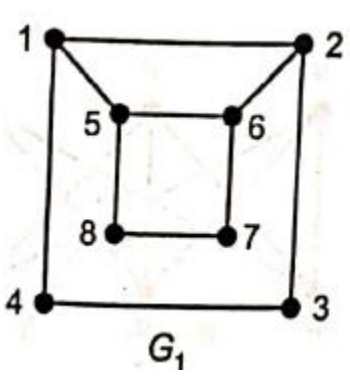
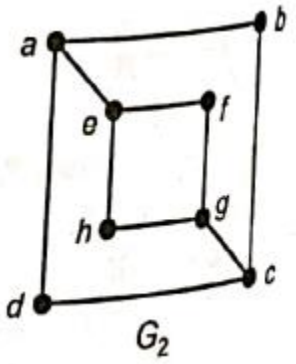
1. Define graph, connected graph, Eulerian graph and Hamiltonian graph.
2. A tree T has k vertices of degree one, two vertices of degree two, three vertices of degree four and four vertices of degree three then find value of "k" .
3. Check whether the graphs below are isomorphic?

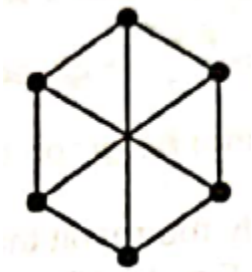


G_1

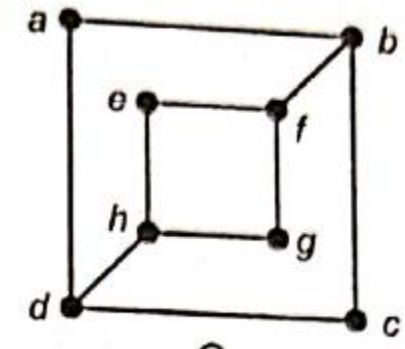


G_2

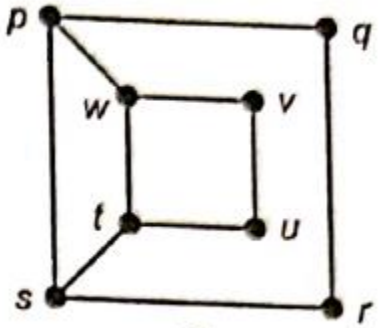
4. Define Bipartite graph, Tree, Regular graph & complete graph.
5. Check whether the graphs below is Eulerian graph or Hamiltonian graph?



6. Check whether the graphs below are isomorphic?



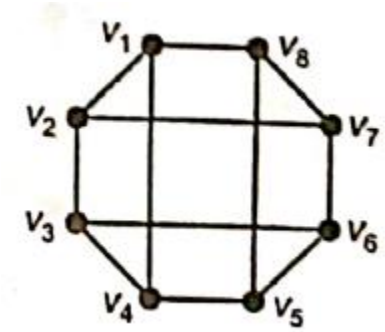
G_1



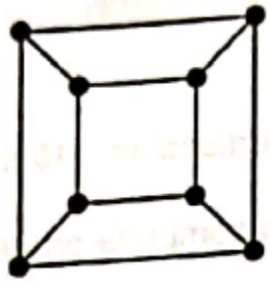
G_2

7. Define (i) Simple graph (ii) Connected graph (iii) complete graph with example.

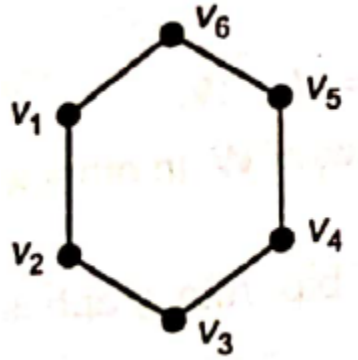
8. Check G is Bipartite graph or not with justification



9. Check whether the graphs below is Eulerian graph or Hamiltonian graph?

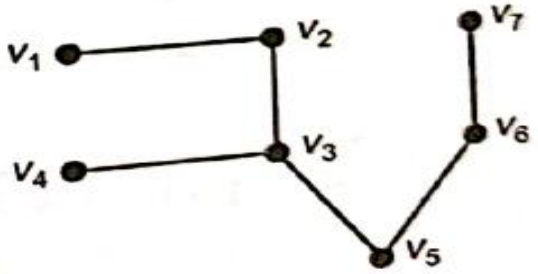


10. Define graph, connected graph, Eulerian graph and Hamiltonian graph.
11. If T is a binary tree with 51 vertices then find maximum height and minimum height of T.
12. Define isomorphic trees and draw three non-isomorphic trees on 5 vertices with justification
13. Define graph, connected graph, regular graph of degree "r" and complete graph.
14. Check given graph is Bipartite graph or not with justification

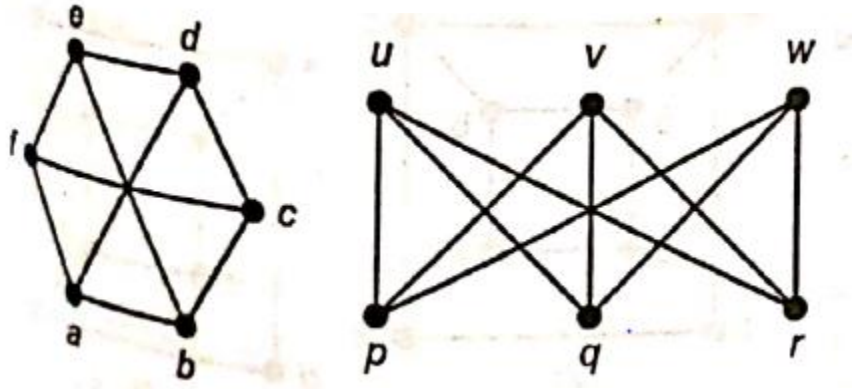


15. Define Eulerian graph and Hamiltonian graph. Give example of graph which is not Eulerian graph but Hamiltonian graph.

16. Check given graph is Bipartite graph or not with justification

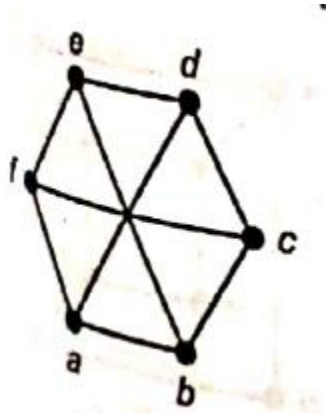


17. Check whether the graphs below are isomorphic?



18. Define Eulerian path , Eulerian circuit Eulerian graph and Hamiltonian graph with example

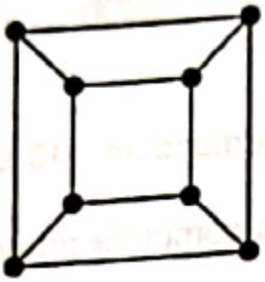
19. Check given graph is Bipartite graph or not with justification



20. Define Tree, Binary Tree, Full Binary Tree with example

21. Define graph, connected graph, Eulerian graph and Hamiltonian graph.

22. Check whether the graphs below is Eulerian graph or Hamiltonian graph?



23. Using the given Haffman tree decode the message (i)011101110110001
(ii)0000011111010