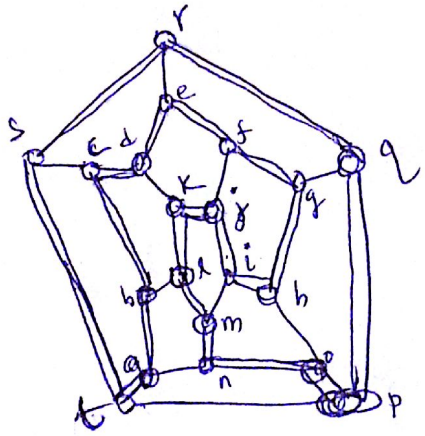
Lab 11. Q.3. Solution

A hamiltonian cycle of an undirected graph $G = (V, E)$ is a simple cycle that contains each vertex in V. The decision of finding whether a graph G has hamiltonian cycle or not is NP-complete problem.

$$\text{HAM-CYCLE} = \{\langle G \rangle : G \text{ is a Hamiltonian Graph}\}$$

The given dodecahedron has a hamiltonian cycle shown by = edges.



Thus, the cycle t a b c d e f g h i j k l m n o p q r s t is a hamiltonian cycle.