

## **Algorithm Design and Analysis**

### **Sample of Exam Test**

1. Lower bound for SORT problem complexity. (1.5 points)
2. Find shortest path between vertices  $v_1$  and  $v_2$  in a given graph applying Floyd-Warshall algorithm. (1 point)
3. Give a theoretical formulation of knapsack problem. (0.5 points)
4. Give a definition of class NP. (0.5 points)
5. What do you know about the complexity of problem HAMILTON ? Does it belong to P? Does it belong to NP? Does it belong to NPC? (0.5 points)