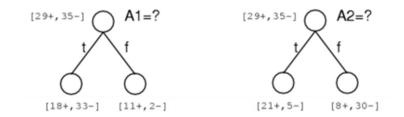
International Islamic University Islamabad

Final Exam: Artificial Intelligence 25th, June 2021 **Instructor:** Dr. Syed Musharaf Ali **Total Marks** = 60

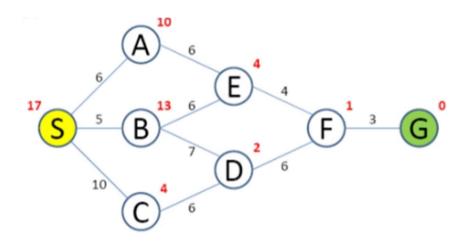
Course code: CS 451

Attempt all the questions. Each question carries 20 marks

Q # 1. Find the information gain of the following attributes A1 and A2.



Q# 2. Find the shortest path from node S to G by using A* search algorithm. H values are mentioned in Red color.



Q# 3. For the given graph find the R matrix and Q matrix by using Q learning algorithm.

For Q matrix find the values of the indexes Q(C, D), Q(A, E), and Q(D, E)

