Artificial Intelligence
Fall 2018

Assignment # 1 (Individual)

Max Marks: 50 **Due Date: September 24, 2018**

Q1. Design and describe "Lahore Traffic Management System". Assume, you are required to design the complete system for an efficient monitoring and management of Lahore traffic. There must be modules for exceptional cases of accidents, stampede, theft, ambulance planning, convoy protocol, number plate recognition system, tracing a specific car in Lahore, etc. High-light software and hardware technology along with communication mechanism as well using suitable diagrams where applicable. (20)

Q2. Comparative analysis of (a) Dynamic route planning algorithms [A*, RTA*, LRTA*, MTS, Bi-directional search, etc.,] and (b) Comparative analysis of features/functions of 4-5 commercial tools/applications available in different parts of the world e.g., USA, UK, Europe, UAE, etc. For example: www.mapquest.com and WAZE https://www.waze.com/livemap https://developers.google.com/waze/ , THEAA, RAC, Green Flag, etc., Propose some modifications or innovation in these route planners for Pakistani environment. (20)

Q3. Assume you have given a project by Cream or Uber for improving dynamic route planning module of their application for the drivers. How you can analyze, design, and improve their application for driver as well as for the passenger. What added advantage or service, you can propose or implement? What extra module or service can be added for Pakistan in order to solve some other issue or problem? Briefly, describe the business model as well in terms of competitive advantage.

GOOD LUCK☺