1st SIT COURSEWORK 1 Question Paper **Autumn 2021**

Module Code:	**CU6051NI**
Module Title:	**Artificial Intelligence**
Module Leader:	**Sunil Raut Kshetri** (Islington College)

Coursework Type:	**Individual**
Coursework Weight:	This coursework accounts for **25%** of your total module grades.
Submission Date:	**Week 10**
When Coursework is given out:	**Week 2**
Submission Instructions:	Submit the following to Islington College RTE department before the due date: ● **Report in PDF format**
Warning:	London Metropolitan University and Islington College take Plagiarism seriously. Offenders will be dealt with sternly.

Plagiarism Notice

You are reminded that there exist regulations concerning plagiarism.

Extracts from University Regulations on Cheating, Plagiarism and Collusion

Section 2.3: “The following broad types of offence can be identified and are provided as indicative examples …..

(i) Cheating: including copying coursework.
(ii) Falsifying data in experimental results.
(iii) Personation, where a substitute takes an examination or test on behalf of the candidate. Both candidate and substitute may be guilty of an offence under these Regulations.
(iv) Bribery or attempted bribery of a person thought to have some influence on the candidate’s assessment.
(v) Collusion to present joint work as the work solely of one individual.
(vi) Plagiarism, where the work or ideas of another are presented as the candidate’s own.
(vii) Other conduct calculated to secure an advantage on assessment.
(viii) Assisting in any of the above.

Some notes on what this means for students:

(i) Copying another student's work is an offence, whether from a copy on paper or from a computer file, and in whatever form the intellectual property being copied takes, including text, mathematical notation and computer programs.
(ii) Taking extracts from published sources without attribution is an offence. To quote ideas, sometimes using extracts, is generally to be encouraged. Quoting ideas is achieved by stating an author's argument and attributing it, perhaps by quoting, immediately in the text, his or her name and year of publication, e.g. " e = mc2 (Einstein 1905)". A reference section at the end of your work should then list all such references in alphabetical order of authors' surnames. (There are variations on this referencing system which your tutors may prefer you to use.) If you wish to quote a paragraph or so from published work then indent the quotation on both left and right margins, using an italic font where practicable, and introduce the quotation with an attribution.

Further information in relation to the existing London Metropolitan University regulations concerning plagiarism can be obtained from http://www.londonmet.ac.uk/academic-regulations

Coursework 1

Coursework 1 is a research work that students need to carry out on the following or similar AI Topics:

- Problem solving and Heuristic Search
- Adversarial search and games
- Natural Processing Language
- Machine Learning
  - Supervised Learning (Classification/Regression)
  - Unsupervised Learning
- Recommendation Systems

The students are free to choose any AI problem/topic of their choice but are required to get the approval from the module leader.
The students are required to study and do research on the chosen topic and develop a conceptual solution for the chosen problem. Students are also required to describe the solution using necessary diagrams and pseudocode.

Submission needs to include:

- ***Report with the following inclusion:***
  - Introduction
    - Explanation of the topic/AI concepts used
    - Explanation/introduction of the chosen problem domain/topic
  - Background
    - Research work done on the chosen topic/problem domain
    - Review and analysis of existing work in the problem domain (may include existing projects/research work already done in the problem domain)
  - Solution (proposed solution to the chosen problem)
    - Explanation of the proposed solution/approach to solving the problem
    - Explanation of the AI algorithm/algorithms used
    - Pseudocode of the solution
    - Diagrammatic representations of the solution (flowcharts/state transition diagrams)
  - Conclusion
    - Analysis of the work done
    - How the solution addresses real world problems
    - Further work

Marking Scheme

Component	Marks Allocated
Introduction	15
Background	30
Solution	30
Conclusion	15
Report Structure and Formatting	10

-END-