**KCA351: Artificial Intelligence Lab**

**Session 2023-24**

**INSTRUCTIONS -:**

1. Program must be written in Python
2. Algorithm and program both are compulsory.
3. One pilot project is mandatory for individual student example Mini Alexa/Gamming project

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| **S.No.** | **Program List** | **Due Date** | **Completion Date** | **Faculty Signature** |
| **Ex-1** | Installation of Python/Anaconda and introduction of Google Colab | First Week |  |  |
| **Ex-2** | Write a program to implement water jug problem' | First Week |  |  |
| **Ex-3** | Write a program to implement missionary and cannibal algorithm | Second Week |  |  |
| **Ex-4** | Write a program to implement breadth first search | Second Week |  |  |
| **Ex-5** | Write a program to implement depth first search | Third Week |  |  |
| **Ex-6** | Write a program to implement 8 Queen Problems | Third Week |  |  |
| **Ex-7** | Write a program to implement first order logic | Fourth Week |  |  |
| **Ex-8** | Write a program to demonstrate the working of Bayesian network. | Fourth Week |  |  |
| **Ex-9** | Write a program to Implement pattern recognition problems of handwritten character/ digit recognition | Fifth Week |  |  |
| **Ex-10** | Write a program to Implement pattern recognition problems of speech recognition | Sixth Week |  |  |
| **Ex-11** | Write a program to implement naive bayes classification problem | Seventh Week |  |  |
| **Ex-12** | Write a program to implement k-mean clustering problem | Eight Week |  |  |
| **Ex-13** | Write a program to convert text to speech using NLP tool | Ninth Week |  |  |
| **Ex-14** | Pilot Project in AI using Python | Tenth Week |  |  |

Compiled by: **Approved by:**

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