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| **Course – 42 Title: Artificial Intelligence Sessional** |  |
| **Course No.: CIT 316** Credit : **0.75** Contact Hours: **3** | Total Marks: 100 |

**11.1 Rationale:** The objective of the lab work is to familiarize students with implementation of theories covered in artificial intelligence.

**11.2 Objectives:**

* To develop the student's understanding of the issues involved in trying to define and simulate intelligence.
* To familiarize the student with specific, well known Artificial Intelligence methods, algorithms and results.
* To provide the student additional experience in the analysis and evaluation of complicated systems.
* To provide the student with paper and proposal writing experience.

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| **11.3 Learning Outcomes** | **11.4 Course Content** | **11.5 Teaching  Learning Strategy** | **11.6 Assessment Strategy** |
| * Implement uninformed search algorithm. | **BFS, DFS, IDS, Depth-limited, Bidirectional etc uninformed search algorithm.** | * Exercise | * Assignment * Viva voce |
| * Implement informed search algorithm. | **Best-first search, A\* search, RBFS, IDA\* search algorithm.** | * Exercise | * Assignment * Viva voce |
| * Generate decision tree by specific classification. | **Decision tree and reasoning** | * Exercise | * Assignment * Viva voce |
| * Prove that whether a corresponding goal is satisfiable or not. | **Introduction to Prolog Programming** | * Exercise | * Assignment * Viva voce |
| * Implement various neural networks in java. | **Neural networks** | * Exercise | * Assignment * Viva voce |

**RECOMMENDED BOOKS AND PERIODICALS**