**Lesson plan**
**Session: 2022-2023**
**Semester: 4th**
**Subject: ACOA**
**Paper Code : INF 1026**

| Month | Topics | Remarks |
|---|---|---|
| April | **Historical foundation of AI. AI application areas**. AI problem, Underlying assumptions, AI techniques, Level of models, success criteria. Problem as a state space search, Production Systems, Problem characteristics, PS characteristics, Design issues of search programs. | |
| May | **Heuristic Search Techniques** : Generate and test, Hill Climbing, Best-First Search, Problem reduction. Knowledge representation and Mapping, Approaches, Issues. Predicate logic. Representing simple facts in logic, Instance and isa relationship, Computable function and predicity, Resolution, Natural Deduction.<br>Knowledge representation using rules, Procedural vs declarative, logic programmes, Forward vs backward recovery, matching. Nonmonotonic reasoning and logic. Implementation: Depth first abd breath first search. | |
| June | Introduction to statistical reasoning. Probability and bays theorem, Fuzzy logic concept. Concept of weak slot and filter, and strong slot and filter structure. Fundamental of Natural Language Processing : Syntactic processing, semantic analysis. Concept of Expert Systems : Representation using domain knowledge, Expert System shell, knowledge acquisition. | Assignment 1 |

Name

Signature

**Lesson plan**
**Session: 2022-2023**
**Semester: 4th**
**Subject: ACOA**
**Paper Code : CSC 1026**

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| April | **Historical foundation of AI. AI application areas**. AI problem, Underlying assumptions, AI techniques, Level of models, success criteria. Problem as a state space search, Production Systems, Problem characteristics, PS characteristics, Design issues of search programs. | |
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