

# Saraswati Mahila Mahavidyalaya, Palwal

## Lesson Plan :

Name of the Assistant/Associate Professor: Shweta Jain

Class and Section: B.C.A Final (VI<sup>th</sup> sem)

Name of subject: Artificial Intelligence

Subject Lesson Plan : 18 weeks(from January 2018 to April 2018)

(Note: Prepare as per list of holidays declared by Haryana govt.)

WEEK 1
ASSIGNMENT: Introduction to AI, AI techniques
WEEK 1, DAY 1, DATE :01/01/2018(MONDAY)
Introduction to AI, Importance of AI, AI and its Related field
WEEK 1, DAY 2, DATE :02/01/2018(TUESDAY)
AI techniques.
WEEK 1, DAY 3, DATE :03/01/2018(WEDNESDAY)
Criteria for Success of AI, Pyramid of Knowledge.
WEEK 1, DAY 4, DATE :04/01/2018(THURSDAY)
Discussion on AI importance and techniques
WEEK 1, DAY 5, DATE :05/01/2018(FRIDAY)
Holiday on account of Guru Govind Singh's Birthday
WEEK 1, DAY 6, DATE :06/01/2018(SATURDAY)

Definition of Problem as a state space search

WEEK 2

ASSIGNMENT: All Searching techniques

WEEK 2, DAY 1, DATE :08/01/2018(MONDAY)

Production System and its characteristics

WEEK 2, DAY 2, DATE :09/01/2018(TUESDAY)

Issues in the design of the <sup>Search</sup> problem

WEEK 2, DAY 3, DATE :10/01/2018(WEDNESDAY)

Generate and test Heuristic Search techniques

WEEK 2, DAY 4, DATE :11/01/2018(THURSDAY)

Hill climbing method

WEEK 2, DAY 5, DATE :12/01/2018(FRIDAY)

Best First Search technique

WEEK 2, DAY 6, DATE :13/01/2018(SATURDAY)

Discussion on searching methods

WEEK 3
ASSIGNMENT: Problem Reduction & Constraint Satisfaction
WEEK 3, DAY 1, DATE :15/01/2018(MONDAY)
Test on State space Search
WEEK 3, DAY 2, DATE :16/01/2018(TUESDAY)
Problem Reduction
WEEK 3, DAY 3, DATE :17/01/2018(WEDNESDAY)
Constraint Satisfaction
WEEK 3, DAY 4, DATE :18/01/2018(THURSDAY)
Revision on all topics
WEEK 3, DAY 5, DATE :19/01/2018(FRIDAY)
Revision on all topics
WEEK 3, DAY 6, DATE :20/01/2018(SATURDAY)
Class presentation on all searching methods
WEEK 4 <del>Topics</del>
ASSIGNMENT: Importance of knowledge and various approaches used in Knowledge Representation
WEEK 3, DAY 1, DATE :22/01/2018(MONDAY)

<b>Holiday on account of Basant Panchmi.</b>
WEEK 4, DAY 2, DATE :23/01/2018(TUESDAY)
Definition of knowledge and importance of knowledge
WEEK 4, DAY 3, DATE :24/01/2018(WEDNESDAY)
<b>Holiday on account of Sir Chotu Ram Jayanti.</b>
WEEK 4, DAY 4, DATE :25/01/2018(THURSDAY)
knowledge pyramid, knowledge representation
WEEK 4, DAY 5, DATE :26/01/2018(FRIDAY)
<b>Holiday on account of Republic Day.</b>
WEEK 4, DAY 6, DATE :27/01/2018(SATURDAY)
Discussion on knowledge
WEEK 5
ASSIGNMENT: Various approaches used in knowledge Representation
WEEK 5, DAY 1, DATE :29/01/2018(MONDAY)
Semantic Networks
WEEK 5, DAY 2, DATE :30/01/2018(TUESDAY)
Classification of nodes in a
WEEK 5, DAY 3, DATE :31/01/2018(WEDNESDAY)
<b>Holiday on account of Guru Ravi Dass Jayanti</b>
WEEK 5, DAY 4, DATE :01/02/2018(THURSDAY)
Reasoning using Semantic Networks

WEEK 5, DAY 5, DATE :02/02/2018(FRIDAY)

Intro of frames

WEEK 5, DAY 6, DATE :03/02/2018(SATURDAY)

Declarative and Procedural frames

WEEK 6

ASSIGNMENT: Conceptual Dependency

WEEK 6, DAY 1, DATE :05/02/2018(MONDAY)

Introduction to Conceptual Dependency

WEEK 6, DAY 2, DATE :06/02/2018(TUESDAY)

Scripts and Components of Scripts

WEEK 6, DAY 3, DATE :07/02/2018(WEDNESDAY)

Discussion on Conceptual Dependency

WEEK 6, DAY 4, DATE :08/02/2018(THURSDAY)

Discussion on Scripts

WEEK 6, DAY 5, DATE :09/02/2018(FRIDAY)

## Test on knowledge approaches

WEEK 6, DAY 6, DATE :10/02/2018(SATURDAY)

**Holiday on account of Maharshi Dayanand Saraswati Jayanti.**

WEEK 7

ASSIGNMENT: Predicate logic

WEEK 7, DAY 1, DATE :12/02/2018(MONDAY)

Role of logic & Propositional logic

WEEK 7, DAY 2, DATE :13/02/2018(TUESDAY)

**Holiday on account of Maha Shivaratri.**

WEEK 7, DAY 3, DATE :14/02/2018(WEDNESDAY)

Syntax of Propositional logic, Semantics of logic  
Propositions

WEEK 7, DAY 4, DATE :15/02/2018(THURSDAY)

Important logical Equivalence, Tautologies,  
Contradictions and Contingencies

WEEK 7, DAY 5, DATE :16/02/2018(FRIDAY)

Representing Instance and is-a relationship

WEEK 7, DAY 6, DATE :17/02/2018(SATURDAY)

predicate logic or first order logic

WEEK 8

ASSIGNMENT: Propositional Logic  
WEEK 8, DAY 1, DATE :19/02/2018(MONDAY)

Predicate, Terms and Quantifiers  
Normal Forms in Predicate Logic

WEEK 8, DAY 2, DATE :20/02/2018(TUESDAY)

Methodology for converting predicate logic formulae  
into Prenex Normal Form.

WEEK 8, DAY 3, DATE :21/02/2018(WEDNESDAY)

Herbrand's Theorem and Resolution

WEEK 8, DAY 4, DATE :22/02/2018(THURSDAY)

Rules of Inference

WEEK 8, DAY 5, DATE :23/02/2018(FRIDAY)

Computable functions and Predicate

WEEK 8, DAY 6, DATE :24/02/2018(SATURDAY)

Discussion on predicate logic Theorem.

WEEK 9	Test of predicate logic
ASSIGNMENT:	Definition of syntactic processing and detail
WEEK 9, DAY 1, DATE	:26/02/2018(MONDAY)
Introduction to syntactic processing	
WEEK 9, DAY 2, DATE	:27/02/2018(TUESDAY)
Semantic processing	
WEEK 9, DAY 3, DATE	:28/02/2018(WEDNESDAY)
VACATION -II	
WEEK 9, DAY 4, DATE	:01/03/2018(THURSDAY)
VACATION -II	
WEEK 9, DAY 5, DATE	:02/03/2018(FRIDAY)
VACATION -II	
WEEK 9, DAY 6, DATE	:03/03/2018(SATURDAY)
VACATION -II	
WEEK 10	Discussion on previous syllabus
ASSIGNMENT:	
WEEK 10, DAY 1, DATE	:05/03/2018(MONDAY)
Discourse and pragmatic processing	



WEEK 10, DAY 2, DATE :06/03/2018(TUESDAY)

Revision

WEEK 10, DAY 3, DATE :07/03/2018(WEDNESDAY)

Test

WEEK 10, DAY 4, DATE :08/03/2018(THURSDAY)

Introduction to Learning

WEEK 10, DAY 5, DATE :09/03/2018(FRIDAY)

Rote learning

WEEK 10, DAY 6, DATE :10/03/2018(SATURDAY)

Learning by taking advice

WEEK 11

ASSIGNMENT: Learning in Problem Solving

WEEK 11, DAY 1, DATE :12/03/2018(MONDAY)

Learning in Problem Solving

WEEK 11, DAY 2, DATE :13/03/2018(TUESDAY)

Learning from Example- induction

WEEK 11, DAY 3, DATE :14/03/2018(WEDNESDAY)

Explanation based learning

WEEK 11, DAY 4, DATE :15/03/2018(THURSDAY)

Revision of learning topics

WEEK 11, DAY 5, DATE :16/03/2018(FRIDAY)

Doubts class

WEEK 11, DAY 6, DATE :17/03/2018(SATURDAY)

Test

WEEK 12

ASSIGNMENT: Introduction of Expert system

WEEK 12, DAY 1, DATE :19/03/2018(MONDAY)

Definition of Expert system

WEEK 12, DAY 2, DATE :20/03/2018(TUESDAY)

Characteristics of an expert system

WEEK 12, DAY 3, DATE :21/03/2018(WEDNESDAY)

Architecture and Description of Modules

WEEK 12, DAY 4, DATE :22/03/2018(THURSDAY)

Knowledge base, Some Production Rules

WEEK 12, DAY 5, DATE :23/03/2018(FRIDAY)

**Holiday on account of Shahidi diwas.**

WEEK 12, DAY 6, DATE :24/03/2018(SATURDAY)

Inference Engine, forward chaining,  
Backward chaining

WEEK 13

ASSIGNMENT:

Expert system life cycle

WEEK 13, DAY 1, DATE :26/03/2018(MONDAY)

Introduction to Expert system life cycle

WEEK 13, DAY 2, DATE :27/03/2018(TUESDAY)

Difficulties in knowledge Acquisition and  
knowledge Acquisition strategies

WEEK 13, DAY 3, DATE :28/03/2018(WEDNESDAY)

## Expert System Tools

WEEK 13, DAY 4, DATE :29/03/2018(THURSDAY)

**Holiday on account of Mahavir jayanti.**

WEEK 13, DAY 5, DATE :30/03/2018(FRIDAY)

Advantages of using Es

WEEK 13, DAY 6, DATE :31/03/2018(SATURDAY)

Limitations of Present day Expert System

WEEK 14

ASSIGNMENT:

Expert system Examples

WEEK 14, DAY 1, DATE :02/04/2018(MONDAY)

Major Application Area of Es

WEEK 14, DAY 2, DATE :03/04/2018(TUESDAY)

Examples of Expert system

WEEK 14, DAY 3, DATE :04/04/2018(WEDNESDAY)

Representation using domain specific knowledge

WEEK 14, DAY 4, DATE :05/04/2018(THURSDAY)

Revision of Es

WEEK 14, DAY 5, DATE :06/04/2018(FRIDAY)

Revision of Es

WEEK 14, DAY 6, DATE :07/04/2018(SATURDAY)

Test Es

WEEK 15

ASSIGNMENT: Expert system shell

WEEK 15, DAY 1, DATE :09/04/2018(MONDAY)

Introduction to Expert system shell

WEEK 15, DAY 2, DATE :10/04/2018(TUESDAY)

Discussion on Expert system shell

WEEK 15, DAY 3, DATE :11/04/2018(WEDNESDAY)

Presentation on Expert system shell

WEEK 15, DAY 4, DATE :12/04/2018(THURSDAY)

Doubts class on ES

WEEK 15, DAY 5, DATE :13/04/2018(FRIDAY)

Test

WEEK 15, DAY 6, DATE :14/04/2018(SATURDAY)

Holiday on account of Vaisakhi & Dr B.R. Ambedkar's Jayanti.

WEEK 16

ASSIGNMENT:

Question on previous syllabus

WEEK 16, DAY 1, DATE :16/04/2018(MONDAY)

Doubt class

WEEK 16, DAY 2, DATE :17/04/2018(TUESDAY)

Class presentation

WEEK 16, DAY 3, DATE :18/04/2018(WEDNESDAY)

**Holiday on account of Maharshi Pasuram Jayanti**

**WEEK 16, DAY 4, DATE :19/04/2018(THURSDAY)**

class doubts

**WEEK 16, DAY 5, DATE :20/04/2018(FRIDAY)**

class discussion on previous question papers

**WEEK 16, DAY 6, DATE :21/04/2018(SATURDAY)**

Revision

**WEEK 17**

**ASSIGNMENT:**

**WEEK 17, DAY 1, DATE :23/04/2018(MONDAY)**

Oral Test

**WEEK 17, DAY 2, DATE :24/04/2018(TUESDAY)**

class discussion to solve <sup>previous year</sup> question papers

**WEEK 17, DAY 3, DATE :25/04/2018(WEDNESDAY)**

Revision

WEEK 17, DAY 4, DATE :26/04/2018(THURSDAY)

Revision

WEEK 17, DAY 5, DATE :27/04/2018(FRIDAY)

Revision

WEEK 17, DAY 6, DATE :28/04/2018(SATURDAY)

Revision

WEEK 18

ASSIGNMENT:

WEEK 18, DAY 1, DATE :30/04/2018(MONDAY)

Revision

Shweta Jain