

SARDAR PATEL UNIVERSITY
Programme: BCA
Semester: IV
Syllabus with effect from: June 2019

Paper Code : US04SBCA24	Total Credit: 2
Title of Paper: Artificial Intelligence	

Lectures per week : 2
All units carry equal weightage.

Exam Duration: 2 hrs

Unit	Description	Weightage (%)
I	Introduction Concepts and Definitions of AI Brief history of AI AI and related fields	25%
II	Expert Systems Introduction Characteristic features of Expert System Representing and Using Domain knowledge General Structure of Expert Systems Expert System Shell Advantages and Disadvantages of Expert system	25%
III	Introduction to AI techniques and Application Areas-I Introduction to Basic search strategies: Some examples and Classification Introduction to Heuristic Search technique: Best First Search Using Predicate Logic Representing simple facts in logic	25%
IV	Introduction to AI techniques and Application Areas-II Introduction to Fuzzy logic Introduction to various application areas of AI like: Natural Language Processing, Game Playing, Robotics	25%

Basic Text & Reference Books:-

1. Elain Rich : Artificial Intelligence, McGraw Hill, 2001.
2. Patterson, Dan W. : Introduction to Artificial Intelligence, Prentice Hall of India (PHI)
3. R.Akerkar : Introduction to Artificial Intelligence, PHI, 2005
4. S. Russell and P. Norvig, Modern Approach to Artificial Intelligence, Prentice Hall of India Ltd., 2006.
5. George Luger, Artificial Intelligence, 5th Edition, Addison Wesley, 2004.