SARDAR PATEL UNIVERSITY
Programme: BCA
Semester: III
Syllabus with effect from: June-2012

Paper Code: US03EBCA02	Total Credit: 2
Title Of Paper: Introduction to Artificial Intelligence	

Unit	Description in detail	Weighting (%)
I	**Introduction** Concepts and definitions of Artificial Intelligence (AI) Brief history of AI AI and related fields The AI problems and underlying assumptions	25%
II	**Expert Systems** Introduction Representing and using domain knowledge Knowledge acquisition and representation General structure of Expert Systems Expert System Shell Advantages and disadvantages of Expert Systems	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 (NLP), Game Playing, Robotics	25%

Basic Text & Reference Books:-

- Elain Rich : Artificial Intelligence,McGraw Hill, 2001.
- Patterson, Dan W. : Introduction to Artificial Intelligence, Prentice Hall of India (PHI)
- R.Akerkar : Introduction to Artificial Intelligence, PHI, 2005
- S. Russell and P. Norvig, Modern Approach to Artificial Intelligence, Prentice Hall of India Ltd., 2006.
- R.Akerker and P. S. Sajja, Knowledge-Based Systems, Jones and Bartlettes, MIT, 2010.
- 6. George Luger, Artificial Intelligence, 5th Edition, Addison Wesley, 2004.