



SC-4335

M. C. A. (Sem. IV) Examination

April / May – 2011

Paper : 405 Artificial Intelligence and knowledge Based System

Time : 3 Hours]

[Total Marks :70

Instructions :

(1)

नीचे दृशावेक निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. C. A. (Sem. IV)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Paper : 405 Artificial Intelligence and knowledge Based System"/>	<input type="text"/>
Subject Code No. : <input type="text" value="4"/> <input type="text" value="3"/> <input type="text" value="3"/> <input type="text" value="5"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	
Student's Signature	

- 1 (a) Define AI. Discuss problem domains of applying AI. 6
(b) Define knowledge. Also write properties of knowledge. 5
(c) Define state space. 3

OR

- (c) Define goal state. 3

- 2 (a) Describe various levels of knowledge representation. 5
(b) What is importance of symbolic logic in AI ? 5

OR

- (b) Explain semantic rules for writing proposition logic. 5
(c) Explain simple proposition using an appropriate example. 4

- 3 (a) Define any one : 3
(i) Satisfiable statement
(ii) Statement equivalence
(b) What is inference ? Explain inference rules in AI. 5
(c) Why structured knowledge representation is needed ? Discuss associative network. 6

4 (a) Explain scripts. 4

OR

(a) Write a note on 'is a' relationship in detail. 4

(b) Describe conceptual dependencies in detail. 5

(c) Define knowledge acquisition. Also describe various methods of learning. 5

5 (a) What is searching ? When blind search is more useful ? 4

(b) Describe depth first iterative deepening search algorithm. 5

OR

(b) Discuss hill climbing method. 5

(c) Explain life cycle of an expert system. Also discuss various possible errors that can occur in expert system. 5
