

1st Sessional Examination 2017-18 (Odd Semester)

Roll No.:

Subject Name: Artificial Intelligence

Year/Branch: IV/CS&IT

Subject Code: NCS 702

Max Time: 1Hours 30 Minute

Max Marks: 50

SECTION-A

Q.1 Attempt all parts carry equal marks. Write answer of each part in short. (2x5=10)

- (a) Explain the term Artificial Intelligence?
- (b) Classify all the Search techniques? What are the different types of search?
- (c) Examine Turing Test.
- (d) Define the role of machine intelligence in human life.
- (e) Illustrate the goals of Artificial Intelligence.

SECTION-B

Note: Attempt any five questions from this section. (5x5=25)

- Q.2** Prove that the Breadth first search and depth first search are special cases of Best first search.
- Q.3** What is an Intelligence agent? Explain architecture of an Intelligence agent.
- Q.4** Illustrate heuristic search? Explain Hill climbing with example.
- Q.5** Explain the term Local Maxima, Ridges and Plateaus.
- Q.6** Classify the evolution of Artificial Intelligence?
- Q.7** Analyse the role of Artificial intelligence in the area of computer vision?
- Q.8** Compare and contrast Breadth first search and Depth first search?
- Q.9** Prepare a short note on the state-of-art of artificial intelligence.

SECTION-C

Note: Attempt any two questions from this section. (7.5x2=15)

- Q.10** Analyse the Water Jug problem with heuristic search technique.
- Q.11** Comment on the term Crypt-Arithmetic and apply it on the following puzzle.
SEND+MORE=MONEY
- Q.12** Discuss the Steepest Ascent Hill Climbing Algorithm and apply it on the following 8 puzzle problem.

1	2	3
8	6	-
7	5	4

Initial State

1	2	3
8	-	4
7	6	5

Goal State