Tribhuvan University

Institute of Science and Technology

2071

Bachelor Level/ Second Year/ Forth Semester/ Science　　　　　Full Marks: 60

Computer Science and Information Technology (CSc.255)　　　　　Pass Marks: 24

(Introduction to Cognitive Science)　　　　　Time: 3 hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. What is cognitive science? Differentiate between cognitive science and other science.

2. Explain and state the characteristics of AI problem and also explain the first characteristic with suitable example.

3. Explain the A* algorithm with example.

4. Explain with example of depth first search. What are the benefits of using depth first search?

   OR

Explain with example of Breadth first search and its benefits.

5. Explain briefly the key difference between procedural and declaration knowledge.

6. Explain the various approaches and issues in knowledge representation with example.

7. Explain the AO* algorithm and its application.

8. Explain with suitable example how Turing machine works?

9. Define the terms:

   a) Pinker

   b) Searle

10. List down the steps in natural language processing and explain them briefly.

    OR

    What are the parameters of natural language processing? Explain syntax with suitable example