

Roll No. ....

Total No. of Questions : 13]

[Total No. of Pages : 02

**D-25**

**[2037]**

**BCA (Semester - 6<sup>th</sup>)**

**ARTIFICIAL INTELLIGENCE (BCA - 601)**

**Time : 03 Hours**

**Maximum Marks : 75**

**Instruction to Candidates:**

- 1) Section - A is **compulsory**.
- 2) Attempt any **Nine** questions from Section - B.

**Section - A**

**Q1)**

**(15 x 2 = 30)**

- a) What is Artificial Intelligence?
- b) Write components of a production system.
- c) What is heuristic search?
- d) Write any two computable predicates.
- e) When do we use Semantic nets?
- f) What do you understand by casual chain in scripts?
- g) Why do we need AI assumptions?
- h) What is a production system?
- i) What do you understand by problem space in AI?
- j) Write any two computable predicates.
- k) When do we use frames?
- l) What is conceptual dependency?
- m) What do you understand by casual chain in scripts?
- n) What is pragmatic processing?
- o) What is meant by class membership?

**P.T.O.**

## Section - B

(9 x 5 = 45)

- Q2)* Discuss the characteristics of Artificial Intelligence problems.
- Q3)* What is the role of conceptual dependency theory? Also discuss the operations performed by a parser.
- Q4)* Give an example of a problem for which breadth-first search would work better than depth-first search.
- Q5)* Construct a script for going to college from the viewpoint of a student of the college.
- Q6)* What are the steps in natural language processing?
- Q7)* Give an example of a problem for which depth-first search would work better than breadth-first search.
- Q8)* What is meant by class membership? Discuss the ways of representing it.
- Q9)* Discuss the steps in natural language processing.
- Q10)* Construct a script for going to office from the viewpoint of an employee of the office.
- Q11)* Use predicates to express the statement: Everyone loves their parents.
- Q12)* Discuss the role of conceptual dependency theory.
- Q13)* Explain techniques of Artificial Intelligence in detail.

