Roll No.

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BCA (Semester - 6th)

[2037]

ARTIFICAL 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?
- 1) 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

 $(9 \times 5 = 45)$

- 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.



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