Total No. of Pages: 02 **Total No. of Questions: 07** 

# BCA (Sem.-6<sup>th</sup>) ARTIFICIAL INTELLIGENCE

**Subject Code: BC-601** Paper ID: [B0223]

Time: 3 Hrs. Max. Marks: 60

#### **INSTRUCTIONS TO CANDIDATE:**

- 1. Section-A is compulsory.
- 2. Section-B Attempt any four questions.

## **SECTION-A**

(10x2=20)

#### Q. 1. Answer in 2-5 Lines:

- What is State Space Search? (a)
- (b) Describe Characteristics of Production System.
- Define Heuristic Function. (c)
- (d) Difference between Declarative and Procedural Knowledge.
- (e) What is Inference Engine?
- Define Knowledge base system. (f)
- Explain Conceptual Dependency? (g)
- (h) Define the term Clause.
- What is Natural Language Processing? (i)
- What is resolution? (j)

### **Section-B**

(4x10=40)

- Q. 2. What is AI? What are its elements? Discuss various Application Areas of AI.
- O. 3. What is production system? Explain various components of Production System.
- Q. 4. How the problem can be defined as state space search? Draw state space diagram for water jug problem.
- Q. 5. Explain various approaches for Knowledge Representation.

Q. 6.	What is FOPL? Explain the Horn Clause and procedure of clausal conversion with an
	example.

- **Q.** 7. Write note on the following:
  - (a) Syntactic Processing
  - (b) Pragmatic Processing

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