Roll No.	*******************
----------	---------------------

Total Pages: 02

### BT-7/D-18

37205

# ARTIFICIAL INTELLIGENCE IT-403-N

Time: Three Hours]

[Maximum Marks: 75

**Note**: Attempt *Five* questions in all, selecting at least *one* question from each Unit.

### Unit I

- 1. (a) Differentiate classical, romantic and modern periods of AI.
  - (b) What do you mean by conflict resolution? Discuss alternative appraoches for conflict resolution. 71/2
- 2. Explain production system architecture in detail. 15

### Unit II

Differentiate prespositional logic and predicate logic. Explain forward and backward chaining algorithm in detail.

15

- 4. (a) Discuss the significance of Robinson's inference rule.
  - (b) Explain inference rules in Propositional Calculus, 71/2

# Unit III

5.	(a)	Discuss the applications of SLD resolution and	SLD
		tree in AI.	71/2
	(b)	Write and explain various steps in controlling	back
		tracking.	71/2
6.	Expl	ain following terms with example with referen	ice to
	Prole	og programming language :	
	(a)	Clauses	
	(b)	Predicates	
	(c)	Cut	·
	(d)	Fail	
	(e)	Inference engine.	15
		Unit IV	
7.	(a)	Discuss Bay's Theorem and its limitations.	71/3
	(b)	Explain A*Algorithm.	7%
8.	Expl	lain in detail the exact inference in Bayesian net	work.
	_		15