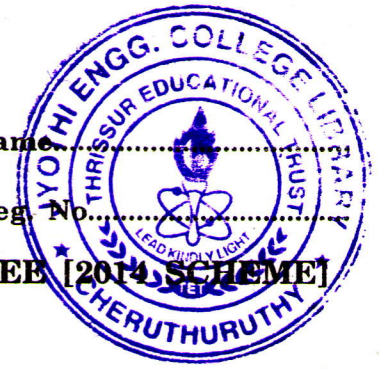


C 30103

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Name.....

Reg. No.....



**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE [2014 SCHEME]  
EXAMINATION, NOVEMBER 2017**

Computer Science Engineering  
CS 14 703—ARTIFICIAL INTELLIGENCE

Time : Three Hours

Maximum : 100 Marks

**Part A**

*Answer any eight questions.  
Each question carries 5 marks.*

1. State the objective of Artificial Intelligence.
2. What do you mean by state space ?
3. Bring out the need of heuristic function.
4. Write short notes on propositional calculus.
5. What do you mean by soundness and completeness of a problem ?
6. Distinguish between syntax and semantics.
7. What is the motivation of the neural network ?
8. Bring out the applications of natural language processing.
9. State the advantages of using macros.
10. Give examples for lambda expressions.

(8 × 5 = 40 marks)

**Part B**

*Answer all questions.*

11. (a) With appropriate examples explain the working of Breadth First Search and Depth First Search in detail.

*Or*

- (b) Explain in detail about iterative deepening of A\*.

12. (a) Discuss in detail about PSAT problem.

*Or*

- (b) Explain in detail about resolution in predicate calculus.

**Turn over**



13. (a) Explain in detail the working of back-propagation method in neural networks.

Or

(b) Elaborate in detail about communication among agents.

14. (a) Explain in detail about predicates, conditional and binding in LISP.

Or

(b) Explain in detail about semantic nets and frames in Prolog.

(4 × 15 = 60 marks)