**Register No:**

**Date:**

**St. Joseph’s College (Autonomous), Bangalore**

**II Semester Examination, April 2017**

**M.Sc Computer Science**

**CS 8115 : Artificial Intelligence**

**Time 2.5 Hrs Max Marks 70**

 **This paper contains 1 printed pages and 1 part**

**PART-A**

**Answer any SEVEN questions 10 x7 = 70**

1. Give examples of problems or games which require AI techniques. Give the role of AI in solving them.
2. Define brute force search. (3)
3. Differentiate BFS and DFS. (7)
4. Define heuristic function. Give its importance in heuristic search techniques. (3)
5. What is A\* search? Explain various stages of A\* search. (7)
6. Define constraint satisfaction problem. Solve the following cryptarithmetic problem.

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1. What is meant by WFF? Give examples. (3)
2. Explain the procedure to convert a WFF into clausal form with an example. (7)
3. Name and define each component of script. (5)
4. Explain Conceptual Dependency with examples. (5)
5. Explain resolution in FOPL with suitable example.
6. Explain the typical architecture of Expert System (7)
7. Comment on the advantages and disadvantages of Expert System. (3)
8. Define the role of role of intelligent agents in problem solving. (5)
9. Write short notes on PROLOG and LISP. (5)