

Code No. B6301

JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY, HYDERABAD
M .Tech. II Semester Supplementary Examinations, March – 2009
ADVANCED AI CONCEPTS
(Image Processing)

Time: 3 hours

Max. Marks.60

Answer any Five questions
All questions carry equal marks

1. What is an AI? Explain about the concepts of problem solving using AI?
2. Trace the constraints satisfaction procedure solving the following crypt arithmetic:
C R O S S
(+) R O A D S
D A N G E R
- 3.a) Explain about knowledge Representation using predicate logic.
b) Explain about Non linear planning using constraint posting?
- 4.a) Differentiate between symbolic Reasoning and statistical reasoning?
b) Explain about logics for non monotonic Reasoning?
5. What is Learning? Explain about different types of learning in detail?
6. Explain about the following:
a) Communication
b) Perception
c) Action
- 7.a) Convert the following logic Representation in to prolog representation?
 $\forall_x : pet(x) \wedge small(x) \rightarrow apartment \text{ } pet(x)$
 $\forall_x : cat(x) \vee dog(x) \rightarrow pet(x)$
 $\forall_x : poodle(x) \rightarrow dog(x) \wedge small(x)$
 $poodle(A)$
b) Write a prolog program to check whether a given number is prime (or) not?
- 8.a) Explain about the data types in LISP.
b) Write a LISP program to find the factorial of a given number.
