DI-1750
M. Sc. (I.T.) (Sem. IX) Examination
March / April - 2016
Artificial Intelligence
(Old & New Course)

Time : 3 Hours] [Total Marks : 70

Instructions :
(1) Fill up strictly the details of \( \) signs on your answer book.

- Name of the Examination :
  - M. Sc. (I.T.) (SEM. 9)

- Name of the Subject :
  - ARTIFICIAL INTELLIGENCE (OLD & NEW)

- Seat No. :

- Subject Code No. : 1750

- Section No. (1, 2, 3, ......) : Nil

- Student's Signature

(2) All questions are compulsory.

1 Explain following terms. (Any SIX) [18]
   1. Combinatorial explosion
   2. Business intelligence
   3. Ontology
   4. Personalization
   5. AND-OR graph
   6. Biometric identification
   7. Non monotonic production system

2 Answer the following. (Any THREE) [18]
   1. Write a note on informed search.
   2. Write a note on intelligent agents.
   3. What is image processing? Write its applications along with its available libraries.
   4. Explain Greedy BFS algorithm in detail.

3 Answer the following. (Any THREE) [18]
   1. Explain propositional logic with suitable example.
   2. Explain O-A-V triplet and frames and with example as KR scheme in AI.
   3. Explain working of search engine as an AI application along with algorithm used in it.
   4. What is a predicate in Prolog? List and explain prolog built-in predicates with example program in Prolog.
4 Answer the following. (Any FOUR)

1. Write a note on expert systems.
2. Explain water jug problem with its solution.
3. Write a note on machine learning along with its applications and its libraries. Explain working of text classification problem as an AI application.
4. How to handle uncertainty in knowledge.
5. Write a note on NLP and its applications.