

Total No. of Questions : 6]

SEAT No. :

**P264**

[Total No. of Pages : 2

**OCT.-16/BE/ Insem. -146**  
**B.E. (E & TC)**  
**ARTIFICIAL INTELLIGENCE**  
**(2012 Pattern)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Figures to the right indicate full marks.*
- 2) *Assume suitable data if necessary.*

**Q1) a)** What is Artificial Intelligence? List the applications of Artificial Intelligence. **[5]**

b) Name four kinds of agent that embody the principles underlying all intelligence system. Discuss any one in detail. **[5]**

OR

**Q2) a)** Explain bidirectional search strategy also explain the limitations of it. **[5]**

b) Write a note on “PEAS” **[5]**

**Q3) a)** Explain greedy best first search algorithm with pseudo code. **[5]**

b) Explain simulated annealing hill climbing algorithm. **[5]**

OR

**Q4) a)** Explain constraint propagation in detail with example. **[5]**

b) Explain mimax search algorithm with pseudo code. **[5]**

**Q5) a)** Explain first order logic symbols with suitable example. **[5]**

b) Explain the Backward reasoning algorithm. How proof tree is used for Backward reasoning algorithm. **[5]**

OR

**P.T.O.**

- Q6)** a) Represent the following sentences by first order logic calculus. [5]
- i) Some dogs bark
  - ii) All dogs have four legs
  - iii) All barking dogs are irritating
  - iv) No dogs purr
  - v) Students are people who are enrolled in courses
- b) Compare forward and backward chaining algorithm. [5]

