

Total No. of Questions : 6]

SEAT No. :

P115

[Total No. of Pages : 2

**Oct.-16/BE/Insem.- 173**

**B.E. (Computer Engineering)**

**SMART SYSTEM DESIGN AND APPLICATIONS**

**(2012 Pattern) (Semester - I)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Attempt Q.1 or Q.2, Q3 or Q.4, Q5 or Q6.*
- 2) *Figures to the right side indicate full marks.*

**Q1)** a) For each of the following agents, develop a PEAS description of task environment. **[6]**

- i) Internet book shopping agent.
- ii) Robot soccer player.

b) Explain different types of learning aspects in AI. **[4]**

OR

**Q2)** a) Write short note on AO\* algorithm. **[4]**

b) Explain GAME as a search problem. **[3]**

c) Explain Adversial search methods. **[3]**

**Q3)** a) Explain components of learning agent. **[6]**

b) Explain Turing test. **[4]**

OR

**Q4)** a) Explain A\* algorithm with suitable example. **[6]**

b) Explain rational agent with diagram. **[4]**

**P.T.O.**

- Q5)** a) What is meant by Alpha - Beta Pruning. [4]  
b) Explain problem reduction methods. [6]

OR

- Q6)** a) Represent following facts using propositional logic. [6]  
i) All pompeian are Romans.  
ii) Caesar was a ruler.  
iii) All Romans were either loyal to Caesar or hated him.  
iv) Everyone is loyal to someone.  
v) People only try to assassinate rulers they are not loyal.  
vi) Marcus tried to assassinate ceasar.  
b) Describe decision network with example. [4]

