

Assignment No - 01

Q1 For each of the following activities give a Peas description of the task in terms of the properties

a) Playing a Tennis match

- Performance : Winning points
- Environment : Tennis court, opponent
- Actuators : Arms, legs
- Sensors : Eyes, ears

b) Performing a high jump

- Performance : Height cleared
- Environment : Track
- Actuators : legs, arms
- Sensors : Eyes, muscles

c) College Selection for Engineering

- Performance : Best ranking for Placement
- Environment : online databases, colleges
- Actuators : Web Search, application form
- Sensors : User preference, ratings

Q2 illustrate with real-time example for the following following kind of agent

a) Simple Reflex agent

Acts only based on concept on current perception (no) memory

b) Model Based Agent

Uses an internal model of the world to make decisions

c) Goal-based Agent also

To achieve a predefined goal

d) Utility-based agents

It is based on utility functions.

Q3 Explain how the components of agent work with suitable example

⇒ Component of an Agent

1] Sensors -

It is used to collect the information

Ex - A robot's camera sees a wall

2) Actuators :-

Actuators performs the actions for example

Ex - Robot wheels move or stop

3] Perception :-

Perception understand the situation

Ex - Robot knows there a wall ahead

4] Decision making

- choose what to do

ex - Robot decide to turn left.