**9.1 Introduction to AI and intelligent agent**: Concept of Artificial Intelligence, AI Perspectives, History of AI, Applications of AI, Foundations of AI, Introduction of agents, Structure of Intelligent agent, Properties of Intelligent Agents, PEAS description of Agents, Types of Agents: Simple Reflexive, Model Based, Goal Based, Utility Based; and Environment Types: Deterministic, Stochastic, Static, Dynamic, Observable, Semi-observable, Single Agent, Multi Agent. (ACtE0901)

#### 1. Central Principe of AI is .....

a. Reasoning, knowledge, planning, learning and communication

b. Perception and ability to move and manipulate objects

c. Science and Engineering of making intelligent machines especially intelligent

computers

d. All of the above

# **2.** If a machine can change its course of action based on external environment on its own then the machine is .....

a. Mobile b. Intelligent c. Both a and b d. Ideal

#### 3. ..... is the goal of AI

a. To extract Scientific Causes

- b. To solve artificial Problems
- c. To solve real word problems
- d. To explain various sources of intelligence

#### 4. Based on ..... parameter AI is categorized.

a. Functionality b. Durability c. Capability d. both a and c

#### 5. The Conference That Launches The Ai Revolution Was Held In?

- a. Harvard
- b. Dartsmouth
- c. New York
- d. London

# 6. Artificial Intelligence (AI) is one of the newest disciplines, formally initiated in \_\_\_\_\_ when the name was coined.

a. 1986 b. 1956 c. 1995 d. 1990

#### 7. What are the main goals of AI?

a.. To Create Expert Systems

- b. To Implement Human Intelligence in Machines
- c. Both A and B
- d. None of the Above

#### 8. Which of the following areas can contribute to build an intelligent system?

- a. Philosophy
- b. Biology
- c. Sociology
- d. All of the above

#### 9. How many types of AI is there?

a. 2 b. 3 c. 4 d. 5

#### 10. An agent can be viewed as .....

- a. perceiving its environment through sensors
- b. acting upon that environment through actuators.
- c. both a and b
- d. None

11. An agent can .....

a. Perceive b. Think c. Act d. all

#### 12. All the following is an example of an actuator except

a. mouth b. Various motors c. ears d. legs

#### 13. Robot's "Arm" Is Called?

- a. Actuator
- b. Effector
- c. Manipulator
- d. Sensors

#### 14. All of the following is an example of agent except ?

a. Self Driving Car b. Thermostat c. Amazon Alexa d. None

#### 15. A rational agent is an agent .....

a. that should take an input or percept sequence and do whatever it likes

b. that should choose an action that is expected to maximize its performance measure

c. that should expected to maximize of achieving its goal on the basis of prior knowledge

### it has

d. both a and b

#### 16. The percept sequence is defined as.....

- a. the performance measure
- b. the input sequence it has till the date
- c. the action an agent performs
- d. prior knowledge it has

#### 17. The full form of PEAS is.....

- a. Performannce, Environment, Actuator, Sensor
- b. Performance, Environment, Actuator, Sensor
- c. Performance, Energy, Action, Sensing
- d. Performance, Energy, Action, Sensing

#### 18. In a vacuum cleaner world the environment is .....

a. vacuum extractor b. battery life c. cleanness d. obstacles

#### 19. Which of the following environment type does the chess playing scenario represents?

- a. Fully observable, Multi agent, Deterministic and Discrete
- b. Partially observable, Multi agent, Deterministic and Discrete
- c. Fully observable, Competitive, Stochastic and Discrete
- d. Fully observable, Competitive, Deterministic and Continuous

#### 20. All of the following about simple reflex agent is true except.....

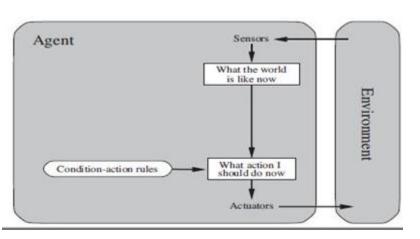
- a. if  $X \rightarrow Y$
- b. decides only on the current input
- c. works on uncertain environment
- d. little unobservability can cause trouble

### 21. In the relation [ $f: P^* \rightarrow A$ ] the ..... Runs on physical architecture to produce f

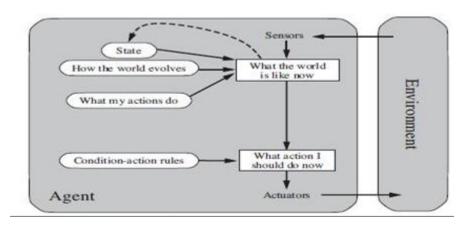
a. Rational Program b. Agent Program c. Actuator Program d. All

## 22. Which of the following figure depicts Goal based agent?

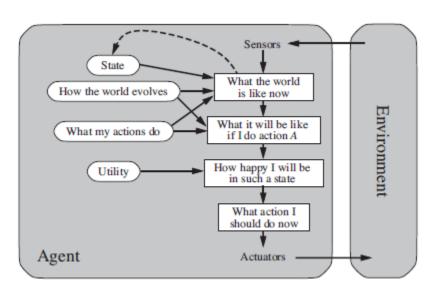
a.

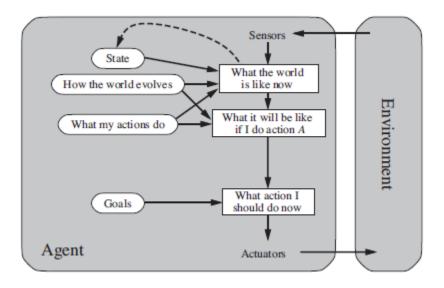


b.



c.





d.

## Answers

1. d 2. b 3.d			
<b>4.d</b>			
5. b			
6.b			
7. c			
8. d			
9.c			
10.c			
11.d			
12. c			
13. a			
14.d			
15.d			
16.b			
10.b			
18. d			
19. a			
20. с			
21.b			
22.d			