**DEBRE MARKOS UNIVERSITY**

**INSTITUE OF TECHNOLOGY**

**SCHOOL OF COMPUTING**

**ARTIFICIAL INTELLIGENT TEST ONE**

**FOR 3RD YEAR SE STUDENTS**

**TIME ALLOWED: 40 MIN VALUE: 20 %**

**NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ID NO.\_\_\_\_\_\_\_\_\_\_\_SECTION\_\_\_\_**

**Part I choose: Write your answers only on the provided space (9pts)**

1. Strong Artificial Intelligence is:
2. The embodiment/copy of human intellectual capabilities within a computer.
3. A set of computer programs that produce output that would be considered to reflect intelligence if it were generated by humans.
4. The study of mental faculties through the use of mental models implemented on a computer. ( C )
5. All E. None
6. Which one of the following task is not requires intelligence?
7. Computer maintenance
8. Face recognition
9. Natural language processing
10. A & C E. None ( E )
11. One is not the branches of AI?
12. **logical AI**
13. **Search AI**
14. **Heuristics**
15. **Pattern recognition**
16. **None (E )**
17. **One is not correct about intelligent?**
18. Use vast amount of knowledge
19. **It is the capability of learning**
20. **Tolerate error and ambiguity**
21. **It is the capability of remembering**
22. **None ( E )**
23. **Which one is not correct about knowledge?**
24. Facts about the real world entities and the relationship between them
25. It may be incomplete/partial and imprecise/indefinite.
26. It may keep on changing (dynamic)
27. It uses to store facts and rules E. None
28. Which one of the following is not correct about the output segments of Artificial Intelligence programming contains.
29. Printed language and synthesized speech
30. Manipulation of physical object
31. Movement
32. All (D ) E. None
33. Medical diagnosis system is the type of agent that uses to identify symptoms, take and understand patient's answers, this is\_\_\_.
34. Environments B. Percepts ( B ) C. Actions D. Goals E. None
35. Which one of the following is correct
36. Crossword puzzle is episodic C. Medical Diagnosis is episodic
37. Crossword puzzle is static ( B ) D. Medical Diagnosis is discrete D. All
38. Which one of the following is not correct about utility based agent
39. Speed C. Cheaper than others E. None
40. Go straight D. All
41. Which one of the following is use as medical diagnosis system agent for sensors and actuators respectively?
42. Display questions, tests, treatments Keyboard entry of symptoms, finding patients answer.
43. Patient ,hospital, staff healthy patient, minimize cost
44. Keyboard entry of symptoms, finding patients answer Display questions, tests, treatments ( C)
45. Healthy patient, minimize cost Patient ,hospital, staff
46. Which one of the following is use as human agent for sensors and actuators respectively?
47. Eyes ,Ears Hands, Legs ( A ) C. Ears, legs Eyes, mouth
48. Mouth, legs Eyes , Ears D. Eyes, mouth Ears, legs
49. Which one is not correct?
50. Architecture uses to run the program
51. Architecture uses to make the percept from the sensors
52. Program uses to accepts percept from an environment and generates actions
53. Program uses to enabling a learning mechanism
54. None ( E )

**Part II Say**

**True or False: Write your answers only on the provided space (0.5 pts. for each)**

1. Actions are done by the agent on the environment and environments provide percepts to an agent. T
2. Agent is something that perceives its environment through effectors and acts upon that environment through sensors. F
3. Omniscience agents take action with expected success, whereas rational agent must take action with hundred percent sure of its success. F
4. Taxi driving is examples of stochastic and Crossword puzzle is examples of deterministic. T
5. Model based agent works by finding a rule whose condition matches the current situation. T
6. To use an intelligent agent, one has to remember is **PEAS. F**

**Part III Fill in the blank space: Write your answers only on the provided space (5pts)**

1. Alan Turing developed a technique for determining whether a computer could or could not demonstrate the artificial Intelligence, Presently, this technique is called­­­­­­:\_\_\_\_\_\_\_\_\_\_\_. **Turing Test**
2. \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ are views of artificial intelligent which are concerned with thought processing and reasoning. **Think humanly and Think rationaly**
3. \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_ are views of artificial intelligent which measures success of AI in terms of human being performance. **Think humanly and Act humanly**
4. \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ are views of artificial intelligent which Concerned with behaviors of agents. **Act humanly and Act rationaly**
5. The characteristics of the computer system capable of thinking, reasoning and learning is known as : \_\_\_\_\_\_\_\_\_\_\_\_\_. **Intelligence**

**Part IV: Writing, Write your answers on the provided space (3pts)**

1. Why we want to build robots, List at least four reasons?
2. What is the difference between human beings and agents, list at least four difference?
3. List all basic and interrelated human capacitie
   1. Affect(feeling)
   2. Behavior(interaction)
   3. Cognition(thought)