



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test I – August 2025 I SEMESTER

Class : I UG
Major : B.Voc(AI&ML)

Time: 2 hours
Maximum Marks: 60

23VAIC03 Fundamentals of Artificial Intelligence

Course Outcomes:

At the end of the course, students will:

1. Understand the basics of Artificial Intelligence.
2. Be familiar with the Prolog Programming Language and build logic using same.
3. Understand the Basic Heuristic Search Techniques.
4. Understand the Advanced Heuristic Search Techniques.
5. Be familiar with the Expert Systems and its Applications.

Part-A

6x1=6

Choose the correct answer

1. Who is known as the -Father of AI"? CO1K1
a. Fisher Ada b. Alan Turing c. John McCarthy d. Allen Newell
2. Select the most appropriate situation for that a blind search can be used. CO1K2
a. Real-life situation b. Small Search Space c. Complex game d. All of the above
3. Among the given options, which search algorithm requires less memory? CO2K1
a. Optimal Search b. Depth First Search c. Breadth-First Search d. Linear Search
4. If a robot can change its own trajectory as per the external conditions, then the robot is considered as the _____. CO2K2
a. Mobile b. Non-Servo c. Open Loop d. Intelligent
5. A technique that was developed to determine whether a machine could or could not demonstrate the artificial intelligence known as the _____. CO2K2
a. Boolean Algebra b. Turing Test c. Logarithm d. Algorithm
6. An AI agent perceives and acts upon the environment using _____. CO2K1
a. Sensors b. Perceiver c. Actuators d. Both a and c

Part- B

3x6=18

Answer ALL Questions

Each answer should not exceed 400 words or two pages

- 7.a. Write short notes on History of AI. (or) CO1K3
- 7.b. Write short notes on Breath First Search with examples. CO1K2
- 8.a. Write about Problem Solving Techniques in AI. (or) CO1K2
- 8.b. Briefly write about Logic Programming. CO2K3
- 9.a. How Do Rules Work in Prolog? (or) CO3K2
- 9.b. Write a simple program in Prolog CO3K2

Part-C

3x12=36

Answer ALL questions

Each answer should not exceed 800 words or four pages

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| 10.a. List and explain the Applications of AI. | (or) | CO1K1 |
| 10.b. Elaborate on Challenges of AI. | | CO1K3 |
| 11.a. In detail explain about AI Agents. | (or) | CO2K1 |
| 11.b. What is Expert System and components of Exert System | | CO2K3 |
| 12.a. Write an Example AI Application in Prolog. | (or) | CO2K4 |
| 12. b. Write in detail about Fundamentals of programming Language in Prolog. | | CO2K1 |

No of Copies: 60

Staff-in-Charge: Dr.T.Prabha