



INDIAN SCHOOL AL WADI AL KABIR

Class: VI	Department: Computer Science	Year: 2026-2027
Worksheet with solutions	Subject: Computer Science Topic: Introduction to AI	

I. Multiple Choice Questions

- Who is known for asking "Can machines think?" and creating a famous test in 1940?**
 - John McCarthy
 - Alan Turing
 - Claude Shannon
 - Herbert Simon
- Which type of intelligence allows a person to understand how others feel and lead a team?**
 - Naturalistic Intelligence
 - Intrapersonal Intelligence
 - Interpersonal Intelligence
 - Computing Intelligence
- What was the "AI Winter" that occurred during the 1980s–1990s?**
 - A very cold season in the history of computers
 - A period where AI research slowed down because computers weren't powerful enough
 - A time when AI systems were only used in snowy regions
 - The name of the first AI software
- A machine that follows fixed rules and cannot learn from its mistakes is an example of:**
 - Artificial Intelligence
 - Machine Learning
 - Automation
 - Human Intelligence
- Which type of Machine Learning uses "rewards and penalties" to help a system learn?**
 - Supervised Learning
 - Unsupervised Learning
 - Reinforcement Learning
 - Automated Learning

6. In which field does AI help doctors detect diseases early and plan treatments?

- a) Banking
- b) E-Commerce
- c) Healthcare
- d) Search Engines

II. Fill in the Blanks

Complete the following sentences using information from your studies.

1. Artificial Intelligence is the combination of Computing and _____.
2. _____ intelligence is the ability to recognize patterns in nature, such as identifying plants and animals.
3. The ability of an AI system to learn from data is specifically called _____.
4. Data that already has a predefined tag or "correct answer" assigned to it is called _____ data.
5. _____ first used the term "Artificial Intelligence" in 1956.

III. Match the Following

Match Column A with the correct description in Column B.

Column A	Column B
1. Supervised Learning	a) Deeply self-aware and understands personal feelings
2. Unsupervised Learning	b) Learns from data that already has correct answers
3. Intrapersonal Intelligence	c) Learns from experience, senses, and emotions
4. Human Intelligence	d) Finds hidden patterns or groupings in unlabelled data

IV. True or False

State whether the following statements are True or False.

1. Machine Intelligence has self-awareness and consciousness just like humans. (____)
2. Email spam detection is a real-world example of Supervised Learning. (____)
3. Automation can easily handle and adapt to new, unfamiliar situations. (____)
4. Howard Gardner's theory states that there are multiple ways for a person to be smart. (____)

V. One Word Questions

Answer the following in only one word.

1. What is the term for data that does not have any labels or tags?
2. Name the "founding father" of AI who first used the term at the 1956 conference.
3. What do we call a machine that repeats the same action every time based on fixed instructions?

VI. Short Answer Questions

Write a brief response to the following.

1. Differentiate between two differences between computing and Intelligence.
2. How does AI become intelligent?
3. Differentiate between human intelligence and machine intelligence.

VII. Define the Following

Provide a clear definition for the terms below.

1. Artificial Intelligence:
2. Machine Learning:

VIII. Application Based Questions

Read the scenarios and answer the questions.

1. **Scenario: Application Question:** A school uses a system to scan student badges. If a badge is scanned, it automatically opens the gate. If a student loses their badge, the system cannot open the gate and must be reprogrammed by a human. **Is this gate system an example of Automation or Artificial Intelligence?**
2. **Scenario:** A tech company is training a robot to play a new video game. The robot gets "points" every time it collects a coin and "loses life" when it touches a spike. **Which specific type of Machine Learning is the robot using to learn the game?**

ANSWERS

I. Multiple Choice Questions

1. b) Alan Turing
2. c) Interpersonal Intelligence
3. b) A period where AI research slowed down because computers weren't powerful enough
4. c) Automation
5. c) Reinforcement Learning
6. c) Healthcare

II. Fill in the Blanks

1. Intelligence
2. Naturalistic
3. Machine Learning (ML)
4. Labelled
5. John McCarthy

III. Match the Following

1. Supervised Learning - b) Learns from data that already has correct answers
2. Unsupervised Learning - d) Finds hidden patterns or groupings in unlabelled data
3. Intrapersonal Intelligence - a) Deeply self-aware and understands personal feelings
4. Human Intelligence - c) Learns from experience, senses, and emotions

IV. True or False

1. False (Machine intelligence has no consciousness or self-awareness)
2. True
3. False (Automation cannot handle new situations)
4. True

V. One Word Questions

1. Unlabelled
2. John McCarthy
3. Automation

VI. Short Answer Questions

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| 1. | Computing is all about using computers to conduct mathematical, logical, or relational calculations. | Intelligence involves learning, reasoning, decision-making, and adapting to new situations |
|----|--|--|
2. **How AI becomes intelligent:** AI systems become intelligent by studying data (such as text, sounds, and images) to find patterns and using those patterns to make decisions.
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|----|--|---|
| 3. | Learns from experience, senses, emotions, and reasoning. | Learns from data, algorithms, and predefined rules. |
|----|--|---|

VII. Define the Following

1. **Artificial Intelligence:** Artificial Intelligence (AI) is the field of computer science that makes machines intelligent, enabling machines to perform tasks that usually require human intelligence.
2. **Machine Learning:** The ability of AI to learn from data is called Machine Learning (ML).

VIII. Application Based Questions

1. Automation (It follows fixed rules, cannot handle new/unfamiliar situations like a missing badge, and needs human reprogramming).
2. Reinforcement Learning