

Foundations of Artificial Intelligence and Machine Learning

Computer Science History · Answer Key · 18 Questions

1. Who is often referred to as the father of theoretical computer science and artificial intelligence?

- A) Alan Turing**
- B) Ada Lovelace
- C) John von Neumann
- D) Charles Babbage

2. In which year was the term 'Artificial Intelligence' officially coined at the Dartmouth Conference?

- A) 1945
- B) 1956**
- C) 1968
- D) 1972

3. Which famous test was proposed by Alan Turing in 1950 to determine if a machine can exhibit intelligent behavior?

- A) The Logic Test
- B) The Turing Test**
- C) The Neural Test
- D) The Binary Test

4. Who wrote the first computer program intended to be executed by a machine?

- A) Grace Hopper
- B) Ada Lovelace**
- C) Alan Turing
- D) Margaret Hamilton

5. What was the name of the first chess-playing computer to defeat a reigning world chess champion in a match?

- A) AlphaGo
- B) Deep Blue**
- C) Watson
- D) ELIZA

6. Which program, created by Joseph Weizenbaum in the 1960s, simulated a psychotherapist?

A) ELIZA

B) Siri

C) Alexa

D) DeepMind

7. In 1997, which company developed the system that beat Garry Kasparov at chess?

A) Microsoft

B) Google

C) IBM

D) Intel

8. What is the name of the Google-developed AI that defeated the world champion of the board game Go in 2016?

A) AlphaGo

B) DeepThought

C) Stockfish

D) AlphaZero

9. Which scientist is credited with inventing the Perceptron, one of the earliest artificial neural networks?

A) Frank Rosenblatt

B) Marvin Minsky

C) John McCarthy

D) Herbert Simon

10. What was the primary goal of the 'Lighthill Report' published in 1973 in the United Kingdom?

A) To advocate for AI funding

B) To evaluate the state of AI research

C) To ban all AI development

D) To standardize AI coding languages

11. In the 1950s, Arthur Samuel coined the term 'Machine Learning' while working on which type of program?

A) A speech recognition system

B) A checkers-playing program

C) A weather forecasting model

D) A database management tool

12. Which AI system developed by IBM gained fame for winning the game show 'Jeopardy!' in 2011?

- A) Watson**
- B) Deep Blue
- C) HAL 9000
- D) Siri

13. The first 'AI Winter' occurred primarily due to:

- A) A lack of computer power and failed expectations**
- B) The invention of the internet
- C) A global shortage of electricity
- D) The rise of personal computers

14. Which logic-based programming language, developed in the 1970s, became very popular for AI research?

- A) Python
- B) Prolog**
- C) Java
- D) Ruby

15. What major breakthrough in the 2010s significantly accelerated the field of Machine Learning?

- A) The invention of the transistor
- B) Deep Learning and neural networks**
- C) The first web browser
- D) The invention of the mouse

16. Marvin Minsky co-founded which influential research institution?

- A) The MIT AI Lab**
- B) The CERN laboratory
- C) The Bell Labs
- D) The Silicon Valley Institute

17. Which historical figure famously predicted that machines would eventually be able to do any intellectual work that a man can do?

- A) Alan Turing**
- B) Charles Babbage
- C) Bill Gates
- D) Steve Jobs

18. What is the primary function of an 'expert system' in early AI history?

A) To play video games

B) To solve specialized problems using human knowledge

C) To translate languages

D) To browse the internet