

Fundamentals of Cryptography

Cryptography · Answer Key · 20 Questions

1. What is the name of the simple cipher that shifts every letter of the alphabet by a fixed number of positions?

- A) Caesar cipher**
- B) Morse code
- C) Binary
- D) Pigpen cipher

2. Which famous method of communication uses dots and dashes to represent letters and numbers?

- A) Braille
- B) Morse code**
- C) Hieroglyphics
- D) Semaphore

3. What is the term for a text that has been converted into a secret format to hide its meaning?

- A) Ciphertext**
- B) Plaintext
- C) Metadata
- D) Algorithm

4. In the Pigpen cipher, what is used to represent the letters of the alphabet?

- A) Musical notes
- B) Geometric shapes**
- C) Animal drawings
- D) Color codes

5. Which machine was famously used by Germany to encrypt messages during World War II?

- A) ENIAC
- B) Enigma**
- C) Colossus
- D) Typewriter

6. What is the study and practice of techniques for secure communication called?

- A) Cryptography**
- B) Calligraphy
- C) Stenography
- D) Typography

7. Which ancient civilization is credited with using one of the earliest known forms of substitution ciphers?

A) Romans

B) Mayans

C) Vikings

D) Incas

8. What is 'plaintext' in the context of codes and ciphers?

A) The encrypted message

B) The original, readable message

C) A type of code key

D) A blank piece of paper

9. Which system uses physical bumps on a page to represent letters for people who are blind?

A) Morse code

B) Braille

C) Semaphore

D) ASCII

10. In computer science, what are the only two digits used in binary code?

A) 1 and 2

B) 0 and 1

C) 3 and 4

D) 9 and 0

11. What is the secret piece of information used to encrypt or decrypt a message called?

A) Key

B) Lock

C) Password

D) Signal

12. Which form of communication uses flags held in specific positions to represent letters?

A) Semaphore

B) Morse code

C) Braille

D) Hieroglyphics

13. What is the process of turning ciphertext back into readable plaintext called?

- A) Encoding
- B) Decoding**
- C) Stretching
- D) Formatting

14. Which famous code-breaking center was based in the United Kingdom during World War II?

- A) Bletchley Park**
- B) Area 51
- C) The Pentagon
- D) The Louvre

15. What does the acronym 'ASCII' represent in computing?

- A) American Standard Code for Information Interchange**
- B) Advanced Secret Cipher for International Intelligence
- C) Automated System for Coding Internal Information
- D) Applied Scientific Code for Internet Interaction

16. What is a 'null cipher' in cryptology?

- A) A code that uses no letters
- B) A message where the hidden meaning is concealed by extra, irrelevant characters**
- C) A cipher that cannot be broken
- D) A system that uses only numbers

17. Which historical leader is often associated with the cipher that shifts letters by three positions?

- A) Julius Caesar**
- B) Napoleon Bonaparte
- C) Alexander the Great
- D) Genghis Khan

18. What is a 'polyalphabetic' cipher?

- A) A cipher that uses multiple substitution alphabets**
- B) A cipher that uses only one alphabet
- C) A code based on numbers only
- D) A message written in multiple languages

19. Which object was used in ancient Greece to wrap parchment around to create a transposition cipher?

- A) Scytale**
- B) Abacus
- C) Astrolabe
- D) Quill

20. What is the main goal of cryptanalysis?

- A) To create secret codes
- B) To break codes without knowing the key**
- C) To write messages in code
- D) To invent new languages