

## Python Concepts (10 Questions)

1. What will the following expression return?

```
int("9")
```

- A. 9
- B. "9"
- C. 9.0
- D. Error

2. Which of the following is a valid string in Python?

- A. 'Hello'
- B. "World"
- C. "(T\_T)"
- D. All of the above

3. What is the output of this code?

```
x = 10  
y = 5  
print(x + y)
```

- A. 15
- B. 105
- C. x + y
- D. Error

4. Which of the following uses the correct operator for addition and assignment?

- A. x += 5
- B. x + = 5
- C. x + == 5
- D. x == + 5

5. What will this expression return?

```
x = 10  
y = 9  
print(x == y)
```

- A. True
- B. False
- C. 1
- D. Error

6. What data type is returned from this code?

```
name = input("Enter your name: ")
```

- A. Integer
- B. String
- C. Float
- D. Boolean

7. Which keyword is used to define a function in Python?

- A. define
- B. function
- C. def
- D. func

8. What will the output be?

```
def add(a, b):  
    return a + b
```

```
print(add(2, 3))
```

- A. 23
- B. 5
- C. add(a, b)
- D. None

9. How many times will this loop execute?

```
for i in range(1, 5):  
    print(i)
```

- A. 3
- B. 4
- C. 5
- D. Infinite

10. What is the final value of `count` after this code runs?

```
count = 0  
while count < 3:  
    count += 1
```

- A. 0
- B. 2

- C. 3
- D. Infinite loop

### **Cybersecurity, AI, Blockchain, Ethics (15 Questions)**

11. What is the goal of phishing?
  - A. To improve network performance.
  - B. To trick people into divulging information.
  - C. To install antivirus software.
  - D. To back up files.
12. What does ransomware do?
  - A. Steals personal information.
  - B. Displays intrusive advertisements.
  - C. Encrypts files and demands ransom.
  - D. Secretly gathers user data.
13. What does social engineering involve in cybersecurity?
  - A. Writing complex computer code.
  - B. Manipulating people to take inappropriate actions.
  - C. Installing firewalls.
  - D. Encrypting data.
14. What is a threat vector in cybersecurity?
  - A. A type of antivirus software.
  - B. A method used by attackers to gain access to a system.
  - C. A security policy.
  - D. A type of firewall.
15. What is the "Plan - Protect - Respond" methodology?
  - A. A method for software development.
  - B. A cybersecurity strategy.
  - C. A marketing plan.
  - D. A financial management technique.
16. Which of the following is a method for creating strong passwords?
  - A. Using only letters.
  - B. Using common words.
  - C. Using numbers, letters, and symbols.
  - D. Using only your birthday.
17. What is a potential negative outcome of AI?
  - A. Increased job opportunities for everyone
  - B. Elimination of bias

- C. Perpetuation of biases in training data
- D. Guaranteed accuracy in all applications

18. What is the purpose of Natural Language Processing (NLP) in AI Chatbots?

- A. To generate images.
- B. To simulate human conversation.
- C. To control robots.
- D. To predict stock prices.

19. What do transformer-based language models do?

- A. Need human involvement to identify patterns in text data
- B. Identify patterns in text data without human involvement
- C. Only generate human languages
- D. Only process human languages

20. What is the Turing Test designed to evaluate?

- A. The processing speed of a computer.
- B. A machine's ability to exhibit intelligent behavior equivalent to, or indistinguishable from, that of a human.
- C. The power consumption of AI systems.
- D. The physical capabilities of a robot.

21. What is a first-party cookie?

- A. A cookie created by a website other than the one you are visiting.
- B. A small text file stored by your browser.
- C. A cookie created by a website you visit to keep track of your preferences.
- D. Malicious software that collects sensitive information.

22. Which of the following is a type of spyware?

- A. Antivirus software
- B. Keystroke Logger
- C. Firewall
- D. VPN

23. What is a key characteristic of blockchain technology?

- A. Centralized control
- B. Immutability
- C. Lack of transparency
- D. Use of intermediaries

24. What is "Proof-of-Work" (PoW)?

- A. A type of cryptocurrency.
- B. A consensus mechanism.
- C. A digital wallet.

D. A cryptocurrency exchange.

25. What is a "gas fee" in cryptocurrency transactions?

A. A fee charged by a bank.

B. A fee charged for transactions by blockchains.

C. A government tax on cryptocurrency.

D. A fee for using a cryptocurrency wallet.

## **Answer Key**

### **Python Concepts (Q1–Q10)**

1. A. 9
2. D. All of the above
3. A. 15
4. B. `x += 5`
5. B. False
6. B. String
7. C. `def`
8. B. 5
9. B. 4
10. C. 3

### **Cybersecurity, AI, Blockchain, Ethics (Q11–Q25)**

11. B. To trick people into divulging information.
12. C. Encrypts files and demands ransom.
13. B. Manipulating people to take inappropriate actions.
14. B. A method used by attackers to gain access to a system.
15. B. A cybersecurity strategy.
16. C. Using numbers, letters, and symbols.
17. C. Perpetuation of biases in training data
18. B. To simulate human conversation.
19. B. Identify patterns in text data without human involvement
20. B. A machine's ability to exhibit intelligent behavior equivalent to, or indistinguishable from, that of a human.
21. C. A cookie created by a website you visit to keep track of your preferences.
22. B. Keystroke Logger
23. B. Immutability
24. B. A consensus mechanism.
25. B. A fee charged for transactions by blockchains.