Class 6

Worksheet

An Introduction to Python

Q1 Multiple Choice Questions (MCQ)

1. Which of the following is a programming language?

   - A) HTML

   - B) Python

   - C) Google

   - D) WhatsApp

2. What does Python emphasize, making it easy to read and understand?

   - A) Complicated syntax

   - B) Shortcuts for coding

   - C) Simplicity and readability

   - D) Limited functionality

3. Which of the following is not a data type in Python?

   - A) Integer

   - B) Float

   - C) String

   - D) Character

4. What does a 'for' loop do in Python?

   - A) Executes a block of code repeatedly

   - B) Defines a function

   - C) Performs mathematical operations

   - D) Represents a conditional statement

5. Which symbol is used for assigning values in Python?

   - A) =

   - B) +

   - C) %

   - D) /

6. What does the 'print()' function do in Python?

   - A) Reads user input

   - B) Displays output

- C) Performs mathematical calculations

- D) Executes loops

7. Which library in Python is used for mathematical functions?

   - A) math

   - B) science

   - C) physics

   - D) calculus

8. What does AI stand for in technology?

   - A) All Inclusive

   - B) Artificial Intelligence

   - C) Advanced Intelligence

   - D) Absolute Information

9. Which of the following is an example of AI technology?

   - A) Microwave

   - B) Calculator

   - C) Robot

   - D) Television

10. What does a 'chatbot' use to interact with users?

   - A) Email

   - B) SMS

   - C) Conversational language

   - D) Morse code

11. Which AI application is used for recognizing faces in photos?

   - A) Facial Recognition

   - B) Image Interpretation

   - C) Visual Categorization

   - D) Object Detection

12. What is the Internet?

   - A) A type of computer

   - B) A network of computers connected worldwide

   - C) A mobile phone

   - D) A software program

13. What is used to access the Internet?

  - A) Television

  - B) Web browser

  - C) Microwave

  - D) Refrigerator

14. Which of the following is an Internet service?

  - A) Cooking recipes

  - B) Email

  - C) Sports equipment

  - D) Television shows

15. What is the basic unit of information on the Internet?

  - A) Cookie

  - B) Packet

  - C) Website

  - D) Message

16. What is used to connect a device to the Internet wirelessly?

  - A) Ethernet cable

  - B) Router

  - C) USB drive

  - D) Printer

17. What is the purpose of an IP address on the Internet?

  - A) To determine the weather

  - B) To identify a device

  - C) To play music

  - D) To write letters

18. Which protocol is used for sending emails over the Internet?

  - A) TCP/IP

  - B) FTP

  - C) SMTP

  - D) HTTP

Q2 Fill in the Blanks

  1. Python is known for its _____ and readability.
  2. The '' symbol in Python is used for writing _____.

3. Variables in Python are used to store _____.
4. Python uses _____ to group statements in a block.
5. AI is a branch of computer science that aims to create _____ that can perform tasks requiring human intelligence.
6. An AI system uses algorithms and _____ to learn from data and make decisions.
7. A 'chatbot' uses AI to simulate _____ communication with users.
8. Machine Learning allows AI systems to improve and make decisions without explicit _____.
9. A device needs an _____ to connect to the Internet.
10. The Internet is a global network of interconnected _____.
11. Wi-Fi provides _____ connectivity.
12. An Internet _____ allows devices to connect to the Internet within a specific area.

Q3 True or False

1. Python is a compiled language.
2. Python uses curly braces `{}` to define code blocks.
3. Python is suitable only for small-scale projects.
4. Python's syntax is complex and difficult to understand.
5. Python does not support object-oriented programming.
6. Python requires strict indentation to define code blocks.
7. Python is a case-sensitive language
8. Python is exclusively used for web development.
9. Python allows for dynamic typing, meaning variable types are determined during execution.
10. AI systems can understand and interpret human emotions.
11. AI requires constant human guidance and intervention to function.
12. AI has no applications in fields like healthcare, finance, or transportation.
13. Every device connected to the Internet has a unique IP address.
14. Email is not a service provided by the Internet.
15. The Internet is a physical network that can be touched or seen.
16. The Internet has no impact on communication or information sharing.

Q4 Short Answer Questions

1. How are variables defined and used in Python?
2. Discuss one practical application of Python in real-life scenarios.
3. Explain the concept of indentation in Python and its significance.
4. Explain one practical application of AI in daily life.
5. Explain what a web browser does and how it helps in using the Internet.
6. Describe the difference between the Internet and the World Wide Web (WWW).
7. Discuss one advantage of using wireless connectivity (Wi-Fi) for accessing the Internet.
8. Can you name an example of an Internet service apart from browsing websites? Explain.