Objective Questions for First Python Lecture

1. History of Python:

1. Who created Python and in which year was it first released?
   a) James Gosling, 1995
   b) Guido van Rossum, 1991
   c) Brendan Eich, 1995
   d) Rasmus Lerdorf, 1994

2. Why did Guido van Rossum name the language 'Python'?
   a) After the Python snake
   b) After Monty Python's Flying Circus
   c) After a popular computer game
   d) After his favorite book

2. Python Features:

3. Which of the following is a key feature of Python?
   a) Complex syntax
   b) Case sensitivity
   c) Readability
   d) Limited library support

4. What does it mean for Python to be an interpreted language?
   a) Code is compiled before execution
   b) Code is executed line by line
   c) Code cannot be run on multiple platforms
   d) Code is difficult to debug

5. Why is Python's readability important for developers?
   a) It makes code faster
   b) It reduces the need for comments
   c) It allows code to be written in fewer lines
   d) It makes code easier to understand and maintain

6. What is the significance of Python's large community and extensive libraries?
   a) It reduces the size of Python programs
   b) It provides extensive support and resources
   c) It limits the use of third-party tools

d) It makes Python proprietary

7. Which of the following applications can Python be used for?
   a) Web development
   b) Data science
   c) Machine learning
   d) All of the above

3. Python Syntax and Basics:

8. What is the correct syntax to print 'Hello, World!' in Python?
   a) `echo "Hello, World!"`
   b) `printf("Hello, World!")`
   c) `print("Hello, World!")`
   d) `console.log("Hello, World!")`

9. Which of the following is the correct extension for a Python file?

   a) `.pyt`

   b) `.pt`

   c) `.py`

   d) `.python`

10. What is the output of the following code?

```
print(3 + 4 * 2)
```

   a) 14
   b) 11
   c) 10
   d) 7

4. Installing Python:

11. Where can you download the official Python installer for Windows?
   a) [python.org](https://www.python.org)
   b) [python.com](https://www.python.com)
   c) [github.com](https://www.github.com)
   d) [sourceforge.net](https://www.sourceforge.net)

12. Where can you download the official Python installer for Mac?
    a) [apple.com](https://www.apple.com)
    b) [python.org](https://www.python.org)
    c) [python.com](https://www.python.com)
    d) [macports.org](https://www.macports.org)

13. How can you verify the Python installation?
    a) `python --install`
    b) `python --version`
    c) `python --check`
    d) `python --validate`

5. Anaconda and Miniconda:

14. What is the difference between Anaconda and Miniconda?
    a) Anaconda includes more pre-installed packages than Miniconda
    b) Miniconda is for Windows, Anaconda is for Mac
    c) Miniconda includes an IDE, Anaconda does not
    d) Anaconda is free, Miniconda is paid

15. Why might someone choose to install Miniconda instead of Anaconda?
    a) Miniconda has a larger community
    b) Miniconda is more customizable and lightweight
    c) Anaconda is not compatible with all operating systems
    d) Anaconda is harder to install

16. Which command creates a new Conda environment with Python 3.8?
    a) `conda create -n myenv python=3.8`
    b) `conda init -n myenv python3.8`
    c) `conda new -n myenv python=3.8`
    d) `conda build -n myenv python=3.8`

6. Setting Up VS Code:

17. What is the purpose of the Python extension in VS Code?
    a) To provide syntax highlighting and code completion for Python
    b) To compile Python code
    c) To manage Python packages
    d) To run Python code on a server

18. How do you install the Python extension in VS Code?
    a) Use the command `python install`
    b) Use the VS Code Extensions view and search for 'Python'
    c) Download it from python.org
    d) It comes pre-installed with VS Code

19. How can you set the Python interpreter in VS Code to use the one provided by Anaconda or Miniconda?
    a) `Ctrl+Shift+P` > 'Python: Select Interpreter'
    b) `Ctrl+Shift+I` > 'Select Python Interpreter'
    c) `Ctrl+Alt+P` > 'Set Interpreter'
    d) `Ctrl+P` > 'Choose Interpreter'

20. What are the steps to create and run a simple Python file in VS Code?
    a) Create a new file with a .py extension, write code, and click 'Run Python File in Terminal'
    b) Create a new file with a .python extension, write code, and click 'Execute'
    c) Open Command Prompt, write code, and run `python file.py`
    d) Use the built-in Python IDE, write code, and click 'Run'