22MCA2S2L

MCA II Semester (NEP) Degree Examination, Nov-2023

MATER OF COMPUTER APPLICATIONS

Paper: Python Programming

Hours: 01 Max Marks: 30

Answer all the questions. Each question carries equal marks.

1. What is Python primarily known for?

- a) High-performance gaming
- b) Web development
- c) Scientific computing
- d) Video editing

2. Which of the following is not a valid Python variable name?

- a) my variable
- b) 123 variable
- c) private variable
- d) MY VARIABLE

3. What is the purpose of the "print" function in Python?

- a) To add comments to your code
- b) To display text on the screen
- c) To perform mathematical calculations
- d) To create a loop

4. Which of the following statements is true about Python's dynamic typing?

- a) You must declare the data type of a variable before using it.
- b) Variables can change their data type during runtime.
- c) Python only supports a single data type for all variables.
- d) Dynamic typing is not a feature of Python.

5. What does the "import" statement in Python allow you to do?

- a) Create a new module
- b) Define a new function
- c) Import external modules and their functions
- d) Execute a specific code block

6. What is the main benefit of using functions in Python?

- a) They make the code shorter and more concise.
- b) They improve code readability and organization.
- c) They enable multi-threading in Python programs.
- d) They automatically handle errors and exceptions.

7. In Python, what does the "pass" statement do?

- a) It executes the code block it is a part of.
- b) It raises an exception.
- c) It does nothing and serves as a placeholder.
- d) It exits the current function.

8. Which operator is used for exponentiation in Python?

- a) a)
- b) ^
- c) //
- d) %

9. What is the primary purpose of a "docstring" in Python?

- a) To declare a variable
- b) To write comments for the developer's reference
- c) To store user input
- d) To provide documentation for a function or module

10. What is the purpose of the "input" function in Python?

- a) To display text on the screen
- b) To wait for user input
- c) To generate random numbers
- d) To define a new function

11. What is the purpose of the "if" statement in Python?

- a) To create loops
- b) To define a function
- c) To perform conditional execution
- d) To print text to the console

12. In Python, what is the symbol for "not equal to" in a conditional statement?

- a) =
- b) !=
- c) ==
- d) <>

13. When would you use the "else" clause in a conditional statement?

- a) When you want to execute a block of code if the condition is true.
- b) When you want to execute a block of code regardless of the condition.
- c) When you want to execute a block of code only if the "if" condition is false.
- d) When you want to create a loop.

14. What does the "elif" keyword stand for in Python?

- a) Else if
- b) Else loop
- c) Exclusive if
- d) Exception handling

15. I	n P	ython,	which	logical	operator	is used	for	"logical	and"?

- a) &&
- b) and
- c) &
- d) |

16. What is the purpose of the "or" operator in a conditional statement in Python?

- a) It combines two conditions, and the statement is true if either condition is true.
- b) It checks if both conditions are true simultaneously.
- c) It is used to create a loop.
- d) It is used for exclusive or (XOR) operations.

17. Which data structure in Python is ordered and mutable?

- a) List
- b) Tuple
- c) Dictionary
- d) Set

18. How do you access an element in a list with the index 2?

- a) list[2]
- b) list(2)
- c) list{2}
- d) list.2

19. What is the key difference between a list and a tuple in Python?

- a) Lists are immutable, and tuples are mutable.
- b) Lists are ordered, and tuples are unordered.
- c) Lists are indexed from 0, and tuples from 1.
- d) Lists can contain elements of different data types, but tuplescannot.

20. In a dictionary, what does a key-value pair represent?

- a) An item in a list
- b) A function definition
- c) An association between a key and a value
- d) A loop condition

21. How do you add a new key-value pair to an existing dictionary?

- a) Using the 'append' method
- b) Using the 'add' keyword
- c) Using the 'insert' function
- d) By assigning a value to a new key

22. Which data structure in Python is best suited for storing a collection of elements with no duplicates?

- a) List
- b) Tuple
- c) Dictionary
- d) Set

23. What is the key difference between a set and a list in Python?

- a) Sets can contain duplicate elements, but lists cannot.
- b) Lists are unordered, but sets are ordered.
- c) Sets can only store integers, while lists can store any data type.
- d) Lists are immutable, but sets are mutable.

24. Which data structure is used to implement a stack in Python?

- a) List
- b) Tuple
- c) Dictionary
- d) Queue

25. How do you check if a key exists in a dictionary?

- a) Using the 'exist' method
- b) By trying to access it and handling the exception
- c) Using the 'contains' keyword
- d) Using the 'in' keyword

26. Who developed Python Programming Language?

- a) Wick van Rossum
- b) Rasmus Lerdorf
- c) Guido van Rossum
- d) Niene Stom

27. Which type of Programming does Python support?

- a) Object-oriented programming
- b) Structured programming
- c) Functional programming
- d) All of the mentioned

28. Which of the following is the correct extension of the Python file?

- a) .python
- b) .pl
- c).py
- d) .p

29. What do we use to define a block of code in Python language?

- a) Key
- b) Brackets
- c) Indentation
- d) None of these

30. Which character is used in Python to make a single line comment?

- a) /
- b) //
- c)#
- d)!