

Name **PROGRAMMING QUESTIONS**

Total questions: 100

Worksheet time: 50mins

Instructor name: Ms. NIRAJANA SELVARAJ

Class Date

1. Which of the following is a valid C variable name?

a) c)variable 1	b) a) 1variable
c) d) variable-1	d) b) variable_1

2. Which of the following is not a valid C data type?

a) d) char	b) c) string
c) a) int	d) b) float

3. What is the output of the following code: `printf("%d", 5 + 3);`?

a) c) 53	b) b) 8
c) d) Error	d) a) 5

4. Which of the following operators is used for logical AND in C?

a) d) !	b) b) &&
c) c)	d) a) &

5. What is the correct way to declare a pointer in C?

a) b) <code>int ptr*;</code>	b) d) <code>ptr int*;</code>
c) c) <code>*int ptr;</code>	d) a) <code>int *ptr;</code>

6. Which of the following functions is used to allocate memory dynamically in C?

a) d) All of the above	b) b) <code>calloc()</code>
c) c) <code>realloc()</code>	d) a) <code>malloc()</code>

7. What will be the output of the following code: `printf("%c", 'A' + 1);`?

a) b) B

b) c) C

c) a) A

d) d) Error
8. What will be the output of the following code: `printf("%d", 10 / 2);`?

a) d) Error

b) b) 5

c) a) 2

d) c) 10
9. Which of the following is a valid way to define a constant in C?

a) d) All of the above

b) c) `int const x = 10;`

c) a) `const int x = 10;`

d) b) `#define x 10`
10. What is the output of the following code: `printf("%s", "Hello, World!");`?

a) c) Error

b) d) World!

c) a) Hello

d) b) Hello, World!
11. Which of the following is the correct syntax to include a header file in C?

a) c) `#include "stdio.h"`

b) d) Both a and c

c) b) `include`

d) a) `#include`
12. What will be the output of the following code: `printf("%f", 3.14);`?

a) a) 3.14

b) b) 3.140000

c) d) 3.1

d) c) Error
13. Which of the following is used to terminate a string in C?

a) c) `\t`

b) b) `\0`

c) d) `\r`

d) a) `\n`

21. What will be the output of the following code: `printf("%d", 5 - 2);`?
- a) c) 7
 - b) b) 2
 - c) d) Error
 - d) a) 3
22. Which of the following is the correct way to comment in C?
- a) a) `// This is a comment`
 - b) c) `# This is a comment`
 - c) b) `/* This is a comment */`
 - d) d) Both a and b
23. Which keyword is used to define a class in C++?
- a) b) `struct`
 - b) a) `object`
 - c) c) `class`
 - d) d) `define`
24. Which of these is not a type of constructor in C++?
- a) b) Copy constructor
 - b) a) Default constructor
 - c) d) Parameterized constructor
 - d) c) Static constructor
25. What is the operator used for dereferencing pointers in C++?
- a) a) `*`
 - b) d) `->`
 - c) c) `&&`
 - d) b) `&`
26. Which keyword is used to make a member variable unmodifiable?
- a) a) `const`
 - b) d) `readonly`
 - c) c) `volatile`
 - d) b) `static`
27. In C++, `cout` and `cin` are defined in which header file?
- a) b) `conio.h`
 - b) a) `iostream`
 - c) c) `stdio.h`
 - d) d) `stdlib.h`

28. Which of these access specifiers allows access only within the same class?
- a) d) extern
 - b) a) public
 - c) b) private
 - d) c) protected
29. What will be the output of `cout << (5 < 3 ? 5 : 3);` in C++?
- a) b) 3
 - b) c) Error
 - c) d) True
 - d) a) 5
30. In C++, what does the `new` keyword do?
- a) d) None of the above
 - b) c) Deallocates memory
 - c) a) Allocates memory on the stack
 - d) b) Allocates memory on the heap
31. In C++, which function is used to release dynamically allocated memory?
- a) c) release
 - b) a) delete
 - c) b) free
 - d) d) remove
32. What will be the output of `cout << (int)'A';` in C++?
- a) d) Error
 - b) a) A
 - c) b) 65
 - d) c) a
33. What will be the output of `cout << 5 / 2;` in C++?
- a) a) 2.5
 - b) d) Error
 - c) c) 3
 - d) b) 2
34. What will be the output of `cout << (10 % 3);` in C++?
- a) a) 1
 - b) c) 10
 - c) b) 3
 - d) d) Error

35. Which of the following is a valid destructor in C++?
- a) d) None of the above
 - b) b) ClassName~()
 - c) a) ~ClassName()
 - d) c) ClassName::()
36. What will be the output of the following code: `printf("%d", 8 + 4 / 2);`?
- a) d) Error
 - b) a) 10
 - c) c) 8
 - d) b) 12
37. What will be the output of `cout << (15 / 4);` in C++?
- a) c) 4
 - b) d) Error
 - c) b) 3.75
 - d) a) 3
38. Which of the following is a valid way to declare a pointer in C?
- a) c) `*int ptr;`
 - b) a) `int *ptr;`
 - c) d) `int &ptr;`
 - d) b) `int ptr*;`
39. What will be the output of the following code: `printf("%d", 10 - 3);`?
- a) c) 3
 - b) a) 7
 - c) d) Error
 - d) b) 10
40. Which of these features does C++ support that C does not?
- a) b) Operator overloading
 - b) c) Classes and objects
 - c) a) Function overloading
 - d) d) All of the above
41. Which of the following is not a Java keyword?
- a) c) `try`
 - b) d) `method`
 - c) a) `static`
 - d) b) `class`

42. Which of the following data types is not primitive in Java?
- a) b) boolean
 - b) c) String
 - c) a) int
 - d) d) double
43. In Java, what will String s = "Hello"; s.toUpperCase(); System.out.println(s); output?
- a) d) Error
 - b) a) HELLO
 - c) b) Hello
 - d) c) hello
44. The correct way to define a method in Java is:
- a) d) None of the above
 - b) b) function method()
 - c) c) define method()
 - d) a) void method()
45. Which of the following is a method that gets called automatically when an object is created in Java?
- a) a) main
 - b) c) constructor
 - c) b) run
 - d) d) new
46. Which method is used to find the length of a string in Java?
- a) a) size()
 - b) b) length()
 - c) d) len()
 - d) c) getLength()
47. What is the correct way to start a thread in Java?
- a) c) start()
 - b) d) begin()
 - c) b) execute()
 - d) a) run()
48. In Java, which keyword is used to inherit a class?
- a) d) inherits_from
 - b) b) extends
 - c) a) inherits
 - d) c) implements

49. What will `System.out.println("Java" + 10 + 20);` output?
- a) b) Java1020
 - b) c) Java 30
 - c) d) Error
 - d) a) Java30
50. Which method must be implemented by all Java threads?
- a) d) start()
 - b) a) run()
 - c) b) execute()
 - d) c) call()
51. What is the result of `10 % 3` in Java?
- a) a) 1
 - b) c) 3
 - c) d) 0
 - d) b) 2
52. In Java, what does `super()` do?
- a) a) Calls the parent class constructor
 - b) c) Calls a static method
 - c) d) None of the above
 - d) b) Initializes a variable
53. What will be the output of `System.out.println(2 + 2 + "2");`?
- a) b) 42
 - b) a) 22
 - c) c) 24
 - d) d) Error
54. Which of the following is a wrapper class in Java?
- a) b) Integer
 - b) c) char
 - c) a) int
 - d) d) double
55. Which of the following statements is true about Java?
- a) a) Java is a platform-independent programming language.
 - b) c) Java is only used for web development.
 - c) d) Java does not support multithreading.
 - d) b) Java does not support object-oriented programming.

56. Which of the following is the correct way to declare a constant in Java?

- a) b) `const int x = 10;` b) d) `int const x = 10;`
c) c) `static int x = 10;` d) a) `final int x = 10;`

57. Which of the following is a valid way to create a loop in Java?

- a) b) while(i < 10) {}
c) a) for(int i = 0; i < 10; i++) {}
b) c) do {} while(i < 10);
d) d) All of the above

58. Which of the following is the correct way to declare an array in Java?

- a) b) int[] arr;
- c) c) arr int[];
- b) a) int arr[];
- d) d) Both a and b

59. What is the correct way to declare a pointer in C?

- a) c) *int ptr; b) d) ptr int*;
c) b) int ptr*; d) a) int *ptr;

60. Which of the following is a valid way to create an array in C++?

- a) `int arr[10];`
c) `int arr(10);`
- b) d) All of the above
d) b) `int arr = new int[10];`

61. In Java, which keyword is used to create an interface?

- a) a) interface b) c) class
- c) b) abstract d) d) implements

62. JavaScript is a ____-side scripting language.

- a) d) None
b) a) Client
c) b) Server
d) c) Both

63. Which of these is a JavaScript framework?
- a) c) Laravel
 - b) d) Flask
 - c) b) React
 - d) a) Django
64. Which method is used to find the length of a string in JavaScript?
- a) a) length()
 - b) d) .length
 - c) c) size()
 - d) b) strlen()
65. What is the output of `console.log(typeof null);` in JavaScript?
- a) b) object
 - b) a) null
 - c) d) function
 - d) c) undefined
66. In JavaScript, how would you display Hello World! in an alert box?
- a) c) `msg("Hello World!");`
 - b) a) `alertBox("Hello World!");`
 - c) b) `alert("Hello World!");`
 - d) d) `console.log("Hello World!");`
67. Which of these is a valid way to declare a variable in JavaScript?
- a) d) All of the above
 - b) b) `let name;`
 - c) c) `const name;`
 - d) a) `var name;`
68. In JavaScript, what is NaN?
- a) c) An undefined variable
 - b) b) Not a number
 - c) a) A number
 - d) d) None of the above
69. Which of the following is not a JavaScript data type?
- a) d) Object
 - b) b) String
 - c) c) Character
 - d) a) Boolean

77. Which of the following is used to define a variable in JavaScript?
- a) d) All of the above
 - b) a) let
 - c) b) var
 - d) c) const
78. What is the output of the following code?
- ```
console.log("5" + 5);
```
- a) c) Error
  - b) d) 5 + 5
  - c) b) 55
  - d) a) 10
79. Which method is used to parse a string and return an integer in JavaScript?
- a) a) parseInt()
  - b) d) Number()
  - c) c) toInteger()
  - d) b) parseFloat()
80. What does === operator in JavaScript check?
- a) a) Equality of values only
  - b) d) None of the above
  - c) c) Equality of both value and data type
  - d) b) Equality of data types only
81. How can you add an element to the end of an array in JavaScript?
- a) c) shift()
  - b) a) push()
  - c) b) pop()
  - d) d) unshift()
82. Which of the following is NOT a JavaScript data type?
- a) b) Boolean
  - b) c) Element
  - c) d) String
  - d) a) Number
83. Which of the following is the correct way to create an array in JavaScript?
- a) a) var colors = "red", "green", "blue";
  - b) b) var colors = ["red", "green", "blue"];
  - c) c) var colors = (1:"red", 2:"green", 3:"blue");
  - d) d) var colors = 1 = ("red"), 2 = ("green"), 3 = ("blue");

84. What is the purpose of the `map()` method in JavaScript?
- a) a) To combine two arrays
  - b) c) To execute a function on each array element and create a new array
  - c) b) To filter out elements in an array
  - d) d) To sort the elements in an array
85. What will `console.log(typeof null);` output in JavaScript?
- a) b) object
  - b) d) string
  - c) c) undefined
  - d) a) null
86. In Python, how do you create a list?
- a) b) ()
  - b) c) {}
  - c) d) <>
  - d) a) []
87. What is the output of `print(type(10.5))` in Python?
- a) d) long
  - b) c) double
  - c) a) int
  - d) b) float
88. Which of the following functions converts a string to uppercase in Python?
- a) b) `toUpperCase()`
  - b) a) `toupper()`
  - c) d) `uppercase()`
  - d) c) `upper()`
89. In Python, what is the output of `print(2 ** 3)`?
- a) c) 9
  - b) d) 4
  - c) b) 8
  - d) a) 6
90. Which of these functions can be used to take user input in Python?
- a) a) `read()`
  - b) b) `input()`
  - c) c) `scan()`
  - d) d) `prompt()`

91. Which of the following is not a Python keyword?
- a) c) define
  - b) a) try
  - c) b) class
  - d) d) finally
92. In Python, what will `print("Hello, World!"[1])` output?
- a) b) e
  - b) d) Error
  - c) a) H
  - d) c) Hello
93. Which of these will import the math module in Python?
- a) a) import math
  - b) d) import.math
  - c) b) include math
  - d) c) math.import()
94. In Python, which of the following is used to check if two variables are equal? In Python, which of the following is used to check if two variables are equal?
- a) d) equal
  - b) b) ==
  - c) c) equals
  - d) a) =
95. Which of the following statements correctly declares a Python dictionary?
- a) b) `my_dict = ("name": "Alice", "age": 25)`
  - b) c) `my_dict = ["name": "Alice", "age": 25]`
  - c) d) `my_dict = {"name", "Alice", "age", 25}`
  - d) a) `my_dict = {"name": "Alice", "age": 25}`
96. What will be the output of the following code?  
`print(type([]) is list)`
- a) b) False
  - b) d) Error
  - c) c) list
  - d) a) True
97. Which of the following is the correct way to read a file in Python?
- a) a) `file.open("file.txt", "r")`
  - b) d) `open("file.txt")`
  - c) c) `file.read("file.txt")`
  - d) b) `open("file.txt", "r")`

98. What will be the output of the following code?

```
print(2 **3** 2)
```

a) b)512

b) a)64

c) d)256

d) c)16

99. Which of the following data structures does NOT allow duplicate values in Python?

a) b) Tuple

b) a) List

c) c) Set

d) d) Dictionary

100. In Python, which operator is used to concatenate two strings?

a) b) &

b) c) \*

c) d) -

d) a) +