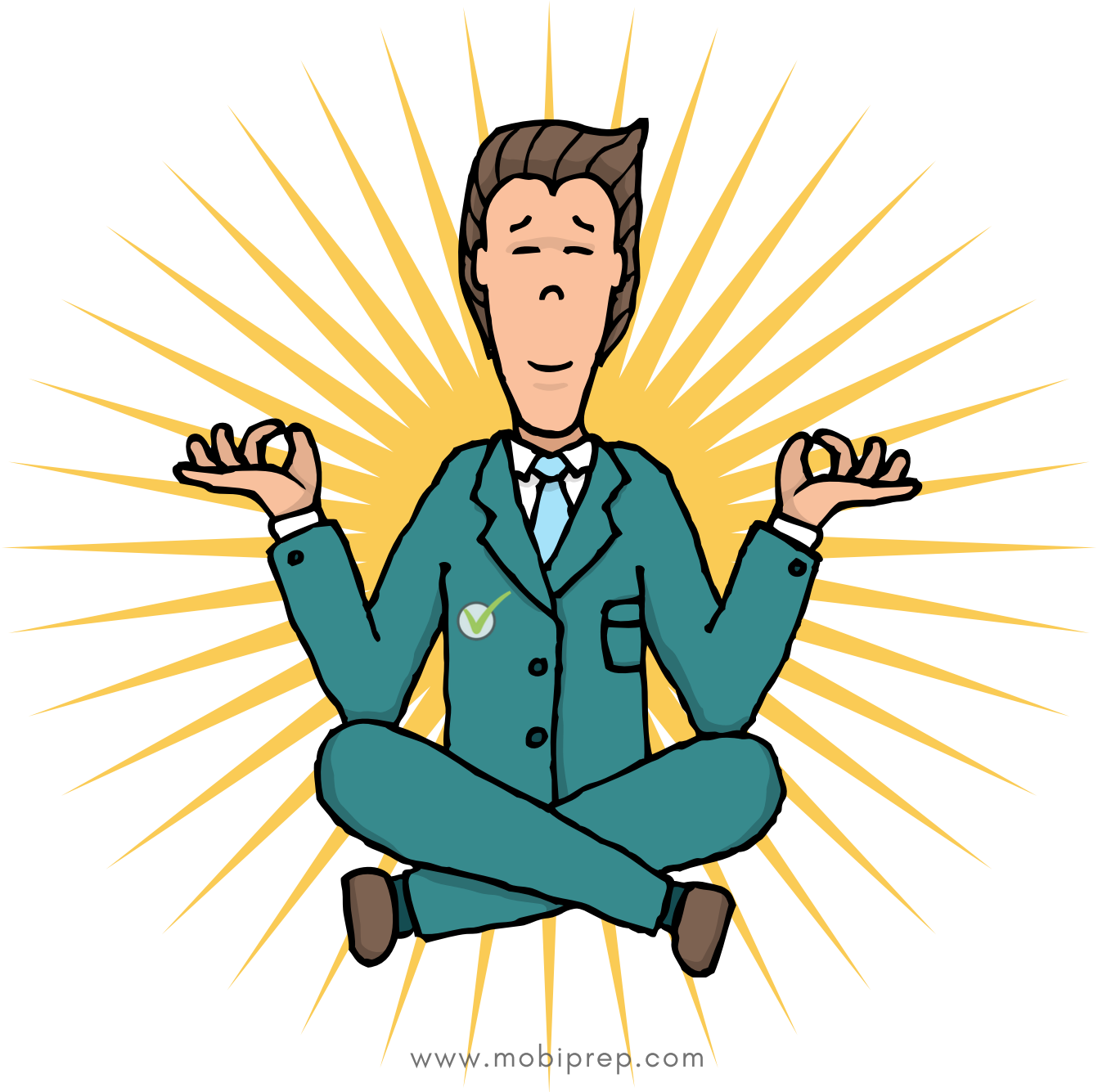
Placement handbook of

C++ PROGRAMMING

TOP 40 MCQ'S WITH ANSWERS



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TOP 40 C++ MCQ's WITH ANSWERS

1. Which of the following is the actual name of C++?

a) C sharp
b) C extended
c) C with classes
d) C actual

Explanation**: It is initially called **C with classes** which later renamed as C++, which means **increment C by 1

2. As of date, how many editions/versions of C++ are seen :

a) **5 editions**
b) 10 editions
c) 6 editions
d) 3 editions

***Explanation**: The 5 versions of C++ are as follows:*

C++98, C++03, C++11, C++14, C++17

3. C++ is an object-oriented language. Select True/False.

a) **True**
b) False

***Explanation**: Object-oriented language is a computer programming language that implements objects and their associated functions/methods within the programming context to achieve the desired!*

4. C++ was developed by :

a) Dennis Ritchie
b) James Gosling
c) Guido van Rossum
d) Bjarne Stroustrup

***Explanation**: Dennis Ritchie – Father of C, James Gosling – Developer of Java, Guido van Rossum – Python developer*

5. What is the latest version of C++?

a) C++98
b) C++03
c) C++17
d) C++14

Explanation: C++98, C++03, C++11, C++14, C++17 – Order of 5 editions.

6. What is size of int data type in c++?

a) 6 Bytes
b) 8 Bytes
c) 2 Byte
d) Depends on Compiler

Explanation*: If it is 16 bits compiler like Turbo C++, the size is 2 bytes while if it is 32 bit compiler like Dev-C++, g++ or Visual Studion, the size is 4 bytes.*

7. C++ is superset of which language?

a) C
b) Assembly
c) Pascal
d) Python

Explanation: *C++ means increment C by 1*

8. How many object can be created of a Class in C++?

a) At most 8
b) No limit
c) 32
d) 16

Explanation*: One can instantiate any number of objects for a given class.*

9. Select a proper statement.

a) One cannot create his own workspace.
b) a class can contain another class in it
c) int a(10) is a different declaration from int a=10;
d) One can reinitialize a reference variable

10. Which is **not** an integer data type?

a) Byte
b) Single
c) Short
d) Integer

Explanation*: Different types of int in c++ are as follows: Unsigned int, signed int, short int, unsigned short int, signed short int, long int, signed long int, Unsigned long int, long long int, unsigned long long int, int.*

11. Select the correct option with respective to the following code snippet.

```
int main()
{
 if(0)
 {
    cout<<"Welcome to Rootworkz Learning";
 }
 else
 {
    cout<<"We are from RootWorkz learning";
 }
return 0;
}
```

a) Welcome to Rootworkz Learning
b) We are from RootWorkz learning
c) Compilation Error
d) No output

Explanation: *In C++ programming, 0 is false 1 is true and thus if(0) evaluates false condition.*

12. How many times **RootWorkz Learning** is printed?

```
int main()
{
    int i=0;
    fun:
    cout<<"RootWorkz Learning";
    i++;
    if(i<5)
    {
        goto fun;
    }
return 0;

}
```

a) 0 times
b) Error in execution
c) **5 times**
d) 4 times

Explanation: *The if condition evaluates i<5 value as true for i value from 0 to 4, and false when i takes the value i=5.*

13. What is the value of rwl in below program?

```
int main()
{
 int rwl, x=20;
 rwl = 90/x;
 if(rwl==4) cout<< "Hello from RootWorkz Learning";
 return 0;
}
```

a) **Hello from RootWorkz Learning**
b) No output as it is not a true condition
c) Compilation Error
d) The program will not be executed

Explanation*: Value of rwl is 90/20 and thus 4.5.Since, rwl is of int type, the 4.5 is truncated to 4*

14. ? , ternary operator, is used in substitute of :

a) For loop
b) Switch case
c) **If statement**
d) No such operator exists

Explanation*: Also called as* ***short-hand if****.*

15. Select the **inappropriate** statement with respective to the code snippet.

```
int x = 20;
string result = (x < 18) ? "RootWorkz Learning is founded in 2019" : "It is a E-Learning platform";
cout << result;
```

a) Outputs *It is a E-Learning platform*
b) ? is used as substitute of if condition
c) No output as there is no such ? operator.
d) Option a, b are correct

16. What is correct syntax of for loop?

a) for(initialization; condition; increment/decrement)
b) for(increment/decrement; initialization; condition)
c) for(initialization, condition, increment/decrement

d) None of These

17. Can a for loop nested?

a) No

b) Yes

18. What is the purpose of loops?

a) They save time, reduce errors, and they make code more readable.

b) To perform operations on variables and values.

c) It can also be used to prevent execution when testing alternative code.

d) to store multiple values in a single variable

19. How many times does the statement *RootWorkz Learning* gets printed?

```
#include <iostream>
using namespace std;

int main() {
  int i = 0;
  do {
    cout << "RootWorkz Learning" << "\n";
    i++;
  }
  while (i < 100);
  return 0;
}
```

a) 0 times

b) 99 times

c) 100 times

d) 101 times

Explanation*: While loop takes I value from 0 to 99, and exists the loop for i=100*

20. Select the appropriate statement in regard with the code snippet.

```
int i = 0;
do {
  cout << i << "\n";
}
while (i < 5);
```

a) Prints the values from 0 to 5 excluding 5.
b) Prints the values from 0 to 5 including 5.
c) Infinite loop
d) Compilation error

***Explanation**: As there no increment to the value of **i**, the above loop turns out to be an infinite loop.*

21. What is output of below program?

```
int main()
{
  int rwl=10;
  int b,c;
  x = rwl++;
  p = rwl;
  cout<<rwl<<x<<p;
  return 0;
}
```

a) Error
b) 111111
c) 101011
d) 101010

***Explanation**: As their no variables initialized with the names x,p*

22. Which of the following is assignment operator?

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

***Explanation**: == is called as Equality operator, >> is Left Shift operator, <= is called Lesser than or equal to*

23. Which operator has more precedence among the following?

*
++
+
-

a) ++
b) *
c) –
d) +

24. How many types of operators are in C++?
a) 3
b) 4
c) 5
d) 6

Explanation*: The 5 types of operators in C++ are as follows: Arithmetic, Assignment, Comparison, Logical and Bitwise operators*

25. && is what kind of operator.
a) Bitwise operator
b) Assignment operator
c) Comparison operator
d) Logical operator

Explanation: *&& - also called as Logical and operator.*

26. How many ways a user can comment a piece of code?
a) 3
b) 1
c) There is no way one can comment in C++
d) **2**

Explanation*: There are 2 ways one can comment in C++:*

1. *Single-line comment using* ***//***
2. *Multi-line comment using* ***/**/***

27. How many different types a variable can be assigned with?
a) 3
b) 4
c) 5
d) 6

Explanation*: 5 types – int, double, string, char, bool*

28. What is the output expected for the below code snippet.

```
#include <iostream>
using namespace std;

int main() {
  int choice = 1;
  switch (choice) {
  case 1:
    cout << "Welcome";
  case 2:
    cout << "to";
  case 3:
    cout << "RootWorkz";
  case 4:
    cout << "Learning";
  }
  return 0;
}
```

a) Welcome
b) Welcome to RootWorkz Learning
c) Does not execute
d) None of the above

Explanation*: The switch case start with the case 1 and exits the loop after executing the case 4 as there is* ***break*** *statement.*

29. How does one perform complex math functions like logarithmic, exponential in C++?
a) One cannot perform such functions in C++
b) By including cmath library.
c) By writing detailed code for it
d) None of the above

Explanation*: cmath is a library that has many functions which allows one to perform many mathematical tasks.*

30. Select the appropriate statement from the following in regard **break**, **continue** keywords
a) There is no difference, those are just 2 keywords used for same functionality
b) **Break** breaks particular iteration, continue doesn't harm any iteration
c) There are no such keywords named **break**, and **continue**.
d) Continue is used to break an iteration, break is used to jump off particular loop.

Explanation*: Self – explanatory.*

31. What is an array in C++

a) These are just function bodies in C++
b) C++ does not support the concept of arrays
c) Arrays are used to store multiple values in a single variable, instead of declaring separate variables for each value.
d) None of the above

Explanation*: Self-Explanatory*

32. Explain the concept of pointers and references in C++?

a) There is no difference, those are just 2 keywords used for same functionality.
b) There is no concept of references in C++
c) There is no concept of pointers in C++
d) References are used to refer an existing variable in another name whereas pointers are used to store address of variable.

Explanation*: Self-explanatory*

33. Which of the following pair best fits the *(x,y)* pair in the given declaration
x array [*y*];

a) int, -10
b) long , 4.5
c) Double , 5
d) double, 15

Explanation*: x refers to data type, y refers to array-size. There is no such type with the keyword Double*

34. In C++, how do you find number of elements in a given array *arr*

a) By using keyword arr.length()
b) By using keyword arr.length
c) sizeof(arr)
d) sizeof(arr)/sizeof(arr[0])

Explanation*: Number of elements in an array refers to length of the array. There is no such keyword called arr.length() and arr.length sizeof(arr) refers to total memory size of array, and thus to find number of elements ratio between total array size and size of each element gives out number of elements*

35. Select the odd one out.

a) Array considers homogeneous type elements only.
b) The pointer variable must be declared with the type to which it is referring to.

c) Increment and decrement operations cannot be performed on pointers

d) Void pointer is a pointer that has no associated data type with it.

Explanation*: Above all are the correct statements other than the answer (marked).*

36. What is the output for the following code snippet?

```
class rwlearning
{

};

int main()
{
    rwlearning obj;
    return 0;
}
```

a) Compilation Error – Constructor Missing

b) Nothing is printed

c) Undefined

d) Error: Improper object instantiation

Explanation*: A class can be empty, thus there can be no error.*

37. Select the odd one out

a) A class can be nested

b) A singleton class can have at most 1 object.

c) Constructor is a special type of function used for declarations

d) C++ does not support the concept of nested class.

Explanation*: All the above statements are true other than the answer, i.e., C++ do support nested classes.*

38. How many different constructors are possible in C++

a) 3

b) 1

c) 0

d) There is no concept called Constructors in C++

Explanation*: Default, parameterized, copy are the different types of constructors in C++*

39. Methods in C++ is similar to which concepts of C

a) Functions
b) Switch case
c) Data structures
d) None of the above

***Explanation**: Self – explanatory*

40. DRY feature of coding is supported by which concept of C++

a) OOP
b) Exception Handling
c) Pointers
d) Arrays

***Explanation**: DRY means **Don't Repeat Yourself**, which means the feature of code reusability. OOP concepts are the ones which support the concept of code reusability.*