MCQ For Friday

1) What is the output of this program.

```
Int a=10:
Main()
Int a=20;
Cout<<::a;
a.20
b.10
c. error
d. Garbage value
```

2) What is the output of the program

```
Main(){
Int n=5,50,555;
Cout<<n;
}
a.5
b.55
c.555
```

sal Institute of gineering 3) 3) What is the output of the program

main(){ int n=(5,50,555); cout<<n;

} a.5 b.55 c.555 d. error

d. error

4) Which of the following is the correct syntax to add the header file in the C++ program?

- a. #include < userdefined >
- b. #include "userdefined.h"
- c. <include> "userdefined.h"
- d. Both A and B
- 5. Which of the following is the correct identifier?

\$var name a. b. VAR 123 c. varname@ d. None of the above 6. Which of the following statements is correct about the class? An object is an instance of its class a. b. A class is an instance of its object c. An object is the instance of the data type of that class d. Both A and C 7. Which of the following statements is correct about the formal parameters in C++? Parameters with which functions are called a. b. Parameters which are used in the definition of the function c. Variables other than passed parameters in a function d. Variables that are never used in the function 1. Which of the following is a valid difference between C and C++? A) C supports object-oriented programming; C++ does not. o B) C++ supports object-oriented programming; C does not. o C) C supports function overloading; C++ does not. o D) C++ supports function overloading; C does not. 2. Which feature is unique to C++ and not present in C? o A) Pointers o B) Dynamic memory allocation C) Classes and objects o D) Preprocessor directives 3. In C++, which keyword is used to define a class? o A) class o B) struct o C) object o D) define 4. Which of the following is NOT a fundamental data type in C? o A) int o B) float o C) bool

5. What does the C++ standard library provide that the C standard library does not?

o D) char

- o A) Mathematical functions
- o B) Input/Output functions
- o C) Data structures like vectors and maps
- o D) Memory allocation functions

6. How is dynamic memory allocation managed in C++?

- o A) malloc and free
- o B) new and delete
- o C) alloc and dealloc
- o D) memory and free_memory

7. In C, which function is used to allocate a block of memory?

- o A) new
- o B) allocate
- o C) malloc
- o D) create

8. Which of the following is true regarding the 'delete' operator in C++?

- A) It can only be used with pointers allocated with new.
- o B) It can be used with pointers allocated with malloc.
- o C) It can be used to free statically allocated memory.
- D) It automatically calls the constructor of the object.

9. Which of the following is an access specifier in C++?

- A) private
- B) public
- C) protected
- D) All of the above

10. Which C++ feature allows a class to be derived from more than one base class?

- A) Inheritance
- B) Multiple inheritance
- o C) Polymorphism
- o D) Encapsulation

11. What is polymorphism in C++?

- o A) A feature that allows one interface to be used for a general class of actions.
- o B) A feature that allows a class to have multiple constructors.
- o C) A feature that allows a function to have multiple return types.
- o D) A feature that allows data hiding.

12. Which of the following is the correct way to declare an integer variable in C?

- o A) int var;
- o B) integer var;
- o C) Int var;
- o D) var int;

13. How do you comment a single line in both C and C++?

- o A) // comment
- o B) /* comment */
- o C) # comment

- o D) <!-- comment -->
- 14. In C++, which operator is used to access members of a class through a pointer?
 - \circ A).
 - \circ B) ->
 - o C)::
 - o D)#
- 15. What is the purpose of the **#include directive in both C and C++?**
 - A) To include library files
 - o B) To define constants
 - o C) To include conditional compilation
 - o D) To include user-defined variables
- 16. Which of the following is true about the main() function in C and C++?
 - o A) It is the entry point of the program.
 - o B) It can be defined multiple times in a program.
 - o C) It is optional in both languages.
 - o D) It must return a float value.
- 17. In C++, what is the concept of RAII (Resource Acquisition Is Initialization)?
 - o A) It ensures resource deallocation is handled by the garbage collector.
 - o B) It ensures resource allocation is tied to object lifetime.
 - C) It ensures automatic type conversion.
 - o D) It ensures multiple inheritance is possible.
- 18. What is a 'virtual function' in C++?
 - A) A function that exists only in the virtual memory.
 - B) A function that can be overridden in a derived class.
 - C) A function that does not return any value.
 - D) A function that is called automatically.