21CS382

USN [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ] | **Question Paper Version : A**

Third Semester B.E./B.Tech. Degree Examination, June/July 2024
Programming in C++

Time: 1 hr.]   [Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

1. Answer all the **fifty** questions, each question carries one mark.

2. Use only **Black ball point pen** for writing / darkening the circles.

3. **For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.**

4. Darkening two circles for the same question makes the answer invalid.

5. **Damaging/overwriting, using whiteners** on the **OMR** sheets are strictly prohibited.

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1. C++ is _____
   a) procedural programming language
   b) object oriented programming language
   c) functional programming language
   d) both procedural and object oriented programming language

2. How structures and classes in C++ differ?
   a) In structures, embers are public by default whereas, in classes they are private by default
   b) In structure, members are private by default whereas, in classes they are public by default
   c) Structures by default hide every member whereas classes do not
   d) structure cannot have private members whereas classes can have

3. What does polymorphism in oops, mean?
   a) concept of allowing overriding of functions
   b) concept of hiding data
   c) concept of keeping things in different modules
   d) concept of wrapping things into a single unit

4. How many types of polymorphism are there in C++?
   a) 1   b) 2   c) 3   d) 4

5. Which of the following approach is used by C++?
   a) Top-down   b) Bottom-up   c) Left-right   d) Right – left

6. Which of the following is correct?
   a) A class is an instance of its objects
   b) An object is an instance of its class
   c) A class is an instanced of the data type that the class have
   d) An object is an instance of the data type of the class

7. Which of the following is not a fundamental type is not present in C but present in C++?
   a) int   b) float   c) boolean   d) void

8. What is the size of a Boolean variable in C++?
   a) 1 bit   b) 1 byte   c) 4 bytes   d) 2 types

9. Which is the following is the correct difference between cin and scanf( )?
   a) both are the same
   b) cin is a stream object whereas scanf( ) is a function
   c) scanf|( ) is a stream object whereas cin is a function
   d) cin is used for printing whereas scanf( ) is used for reading input

10. Which of the following is an entry – controlled loop?
    a) for   b) while   c) do-while   d) both while and for

11. Data members and member functions of a class in C++ program are by default
    a) protected   b) public   c) private   d) none

12. Which operator is used to allocate an object dynamically of a class in C++?
    a) scope resolution operator
    b) conditional operator
    c) new operator
    d) membership operator

13. Which is used to define the member function of a class externally?
    a) :   b) : :   c) #   d) none

14. If you want to write multiple functions in a class with same name, then what C++ feature will you use?
    a) Function overriding
    b) Encapsulation
    c) Function overloading
    d) None

15. Polymorphism types is/are
    a) compile time   b) run time   c) both a and b   d) none

16. In C++ code, variables can be passed to a function by
    a) pass by value   b) pass by reference   c) pass by pointer   d) all of these

17. Constant function in C++ can be declared as
    a) void display( )
    b) void display( )const
    c) const void display( )
    d) void const display( )

18. Which fn can be called without using an object of a class in C++
    a) static function
    b) inline function
    c) friend function
    d) constant function

19. Which of the following fn declaration using default arguments is correct?
    a) int foo(int x, int y = 5, int z = 10)
    b) int foo(int x = 5, int y = 10, int z)
    c) int foo(int x = 5, int y, int z = 10)
    d) all are correct

20. Overloaded functions in C++ are
    a) Functions preceding with virtual keyword
    b) Functions inherited from base class to derived class
    c) Two or more functions having same name but different number of parameters
    d) none of these

21. When you create an object of a class A like A obj ; then which one will be called automatically
    a) constructor   b) destructor
    c) copy constructor   d) none of these

22. How many parameters does a default constructor required?
    a) 1   b) 2   c) 0   d) 3

23. What is the role of a constructor in class?
    a) To modify the data whenever required
    b) To destroy an object
    c) To initialize the data members of an object when it is created
    d) To call private functions from the outer world

32. Which of the following is not a file opening mode?
    a) iso : : ate
    b) ios : : nocreate
    c) ios : : noreplace
    d) ios : : truncate

33. If we have object form of stream class, then default mode of opening the file is
    a) ios : : in
    b) ios : : out
    c) ios : : in/ios : : trunc
    d) ios : : out/ios ; : trunk

34. _____ is return type of is-open( ) function
    a) int   b) boolean   c) float   d) char *

35. To create an output stream, we must declare the stream to be of class _____
    a) ofstream   b) ifstream   c) iostream   d) none of these

36. Streams that will be performing both input and output operations must be declared as class __
    a) iostream   b) fstream   c) stdstream   d) stdostream

37. To perform file i/o operations, we must use _____ header file
    a) <ifstream.h>   b) <ofstream.h>   c) <fstream.h>   d) none of these

38. Which of the following is not used to seek a file pointer?
    a) ios : : cur   b) ios : : set   c) ios : : end   d) ios : : beg

39. Which function is used in C++ to get the current position of the file pointer in a file?
    a) tell_p( )   b) get_pos( )   c) get_p( )   d) tell_pos( )

40. Which function is used to reposition the file pointer?
    a) moveg( )   b) seekg( )   c) changep( )   d) go_p( )

41. Which is used to handle the exceptions in C++?
    a) catch handler   b) handler
    c) exception handler   d) throw

42. Which type of program is recommended to include in try block?
    a) static memory allocation
    b) dynamic memory allocation
    c) const reference
    d) pointer

43. Which statement is used to catch all types of exceptions?
    a) catch( )   b) catch(Test t)   c) catch(. . .)   d) catch (Test)

44. Which illustrate predefined exceptions
    a) memory allocation error
    b) I/O error
    c) both a and b
    d) none of these

45. How many parameters does the throw expression has in C++?
    a) 1   b) 2   c) 3   d) 4

46. What is an exception in C++ program?
    a) A problem that arises during the execution of the program
    b) A problem that arises during compilation
    c) Also known as the syntax error
    d) Also known as semantic error

47. By default, what a program does when it detects an exception?
    a) continue running
    b) results in the termination of the program
    c) calls other functions of the program
    d) removes the exception and tells the programmer about the exception

48. Why do we need to handle exceptions?
    a) To avoid unexpected behavior of a program during run time
    b) To let complier remove all exceptions by itself
    c) To successfully compile the program
    d) To get correct output

49. How exception handling is implemented in C++?
    a) Using Exception keyword
    b) Using try-catch bock
    c) Using Exception block
    d) Using Error handling schedules

50. Which of the following is an exception in C++?
    a) Divide by zero
    b) Semicolon not written
    c) Variable not declared
    d) An expression is wrongly written.

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