1.   All questions are compulsory.   2.   Figures to the right indicate full marks.
3.   Students will be allowed 15 Minutes extra time per hour.

PART A

Q.1 Multiple Choice Questions   **(35 Marks)**

1. Which of the following is a correct identifier in C++?
   a)7var_name   b) 7VARNAME\   c) VAR_1234   d) $var_name
2. Which of the following is called an address operator?
   a) *   b) &   c) _   d) %
3. Which of the following is called insertion/put to operator?
   a)>>   b) <<   c) >   d)<
4. What is the size of a Boolean variable in C++?
   a)1 bit   b) 1 byte   c) 4 bytes   d) 2 bytes
5. Which of the following is an exit-controlled loop?
   a)For   b) While   c) do-while   d) while and for
6. Which of the following is accessed by a member function of a class?
   a)The object of that class   b)All members of a class
   c) The public part of a class   d) The private part of a class
7. Why is this pointer used?
   a)To access the members of a class which have the same name as local variables   in that scope   b)
   To access all the data stored under that class
   c) To access objects of other class   d) To access objects of other variables
8. How many types of polymorphism are there?
   a)1   b) 2   c) 3   d) 4
9. Pick the odd one out.
        a) a)array type   b) character type   c) boolean type   d) integer type
10. Which reference modifier is used to define the reference variable?
    a) &   b) $ c) #   d) @
11. What will be used when terminating a structure?
    a) :   b) }   c) ;   d) ;;
12. Which function is used to check whether a character is an alphabet?
    a) isalpha() b) isalnum()   c) isdigit()   d) isblank()
13. The if..else statement can be replaced by which operator?
    a) Bitwise operator   b) Conditional operator
    c) Multiplicative operator   d) Addition operator
14. Which looping process is best used when the number of iterations is known?
    a) for   b) while
    c) do-while   d) all looping processes require that the iterations be known
15. What is used to write multi line comments in c++?
    a) /* .... */   b) /$ .... $/   c) //   d) /$ .... */
15. Which of the following is the default mode of the opening using the ifstream class?
    a) ios::in   b) ios::out   c) ios::app   d) ios::trunc
16. Which is used to handle the exceptions in c++?
    a) catch handler   b) handler   c) exception handler   d) throw
17. What is the mandatory preprocessor directive for c++?
    a)iostream.h   b)stdio.h   c) string.h   d)math.h
18. How to handle error in the destructor?
    a) throwing   b) terminate   c) throwing & terminate   d) try

19. Which of the following is used to move the file pointer to the start of a file?
    a) ios::beg   b) ios::start   c) ios::cur   d) ios::first
20. By default, all the files in C++ are opened in _____ mode.
    a) Text   b) Binary   c) ISCII   d) VTC
21. Virtual functions in C++ tells the compiler to perform _____ on such functions.
    a) static binding   b) late binding   c) compile time binding   d) no binding
22. Which header file is required to use file I/O operations?
    a) <ifstream>   b) <ostream>   c) <fstream>   d) <iostream>
23. What is the order of Destructors call when the object of derived class B is declared, provided class B
    is derived from class A?
    a) Destructor of A followed by B   b) Destructor of B followed by A
    c) Destructor of A only   d) Destructor of B only
24. How many specifiers are used to derive a class?
    a) 1   b) 2   c) 3   d) 4
25. How to declare an operator function?
    a) operator sign   b) operator   c) name of the operator   d) name of the class
26. Which special character is used to mark the end of class?
    a) ;   b) :   c) #   d) $
27. The data members and functions of a class in C++ are by default _____
    a) protected   b) private   c) public   d) public & protected
28. Constructors are used to _____
    a) initialize the objects   b) construct the data members
    c) both initialize the objects & construct the data members) delete the objects
29. When struct is used instead of the keyword class means, what will happen in the program?
    a) access is public by default b) access is private by default
    c) access is protected by default   d) access is denied
30. Which of the following features is used in function overloading and function with default argument?
    a) Encapsulation   b) Polymorphism
    c) Abstraction   d) Modularity
31. From which function the execution of a C++ program starts?
    a) start() function   b) main() function   c) new() function   d) end() function
32. An inline function is expanded during _____
    a) compile-time   b) run-time   c) never expanded   d) end of the program
33. The value 132.54 can be represented using which data type?
    a) double   b) void   c) int   d) bool
34. In which part of the for loop termination condition is checked?
    for(I;II;III)
    {IV}
    a) I   b) II   c) III   d) IV

Answer Sheet for Multiple Choice Questions

Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.
1		8		15		22		29	
2		9		16		23		30	
3		10		17		24		31	
4		11		18		25		32	
5		12		19		26		33	
6		13		20		27		34	
7		14		21		28		35	

Note: -
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Q.2 - Answer the Following - (Any 2)   08 Marks
  1. Explain Operators in detail.
  2. Explain OOP's concepts in detail.
  3. WAP to accept a number from the user and check if it is a prime number or not.
  4. Write difference between procedure-oriented programming and object-oriented programming.

Q.3 - Answer the Following - (Any 2)   08 Marks
  1. What is Class & Object? Explain in detail.
  2. WAP to create a class named student which is having following data members.
      Sid, sname, marks
      Have to store data for 5 students.
  3. Explain constructor & destructor.
  4. Write the difference between constructor and destructor with syntax & example.   (P.T.O)

Q.4 - Answer the Following - (Any 2)   08 Marks
    1. What is polymorphism?
    2. Explain static binding & dynamic binding.
    3. Explain virtual functions.
    4. Explain this pointer.

Q.5 - Answer the Following - (Any 2)   08 Marks
    1. What is Exception handling?
    2. Explain Inheritance.
    3. WAP for multiple Inheritance.
    4. Explain any 2 types of inheritance.

Q.6 - Answer the Following - (Any 2)   08 Marks
    1. What is file handling?
    2. WAP to accept name and address from user, and write in file.
    3. Explain any 2 modes of file with examples.
    4. WAP to read a number of characters from a file.

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