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**EXAMINATION PAPER**

**FACULTY : COMPUTER SCIENCE AND MULTIMEDIA**

**COURSE : BACHELOR OF INFORMATION TECHNOLOGY (Hons)**

**YEAR/ SEMESTER : FIRST YEAR / SEMESTER TWO**

**MODULE TITLE : OOP C++**

**CODE : BIT 121**

**DATE : SEPTEMBER 23-2018, SUNDAY**

**TIME ALLOWED : 3 HOURS**

**START : 1:00 PM FINISH: 4:00 PM**

**Instruction to candidates**

1. This question paper has THREE (3) Sections.
2. Answer **ALL** questions in Section A, MCQ.
3. Answer **5** questions in Section B, MSAQ.
4. Answer **2** questions in Section C, MEQ.
5. No scripts or answer sheets are to be taken out of the Examination Hall.
6. For Section A, answer in the OMR form provided.

***Do not open this question paper until instructed***

**SECTION A**

**Multiple Choice Questions (30\*1=30)**

1. **Which of the following is not a type of constructor?**
2. Copy Constructor
3. **Friend Constructor**
4. Default Constructor
5. Parameterized Constructor
6. **Which of the following is not the member of Class?**
7. Static Function
8. **Friend function**
9. Const Function
10. Virtual Function
11. **Cout is a/an \_\_\_\_\_.**
12. operator
13. function
14. **object**
15. macro
16. **How many types of polymorphisms are supported by C++?**
17. 1
18. **2**
19. 3
20. 4
21. **Which of the following statement is correct?**
22. **A constructor is called at the time of declaration of an object.**
23. A constructor is called at the time of use of an object.
24. A constructor is called at the time of declaration of a class.
25. A constructor is called at the time of use of a class.
26. **Which of the following approach is adapted by C++?**
27. Top-down
28. **Bottom-up**
29. Right-left
30. Left-right
31. **Which of the following concept of oops allows compiler to insert arguments in a function call if it is not specified?**
32. Call by value
33. Call by reference
34. **Default arguments**
35. Call by pointer
36. **Which of the following is a valid class declaration?**
37. Class A { int x; };
38. Class B { }
39. Public class A{ }
40. Object A { int x; };
41. **Which class is used to design the base class?**
42. **Abstract class**
43. Derived class
44. Base class
45. None of the mentioned
46. **What is an array?**
47. **An array is a series of elements of the same type in contiguous memory locations**
48. An array is a series of element
49. An array is a series of elements of the same type placed in non-contiguous memory locations
50. None of the above
51. **Which of the following statement is correct?**
    1. **Class is an instance of object.**
    2. Object is an instance of a class.
    3. Class is an instance of data type.
    4. Object is an instance of data type.
52. **Which header file is used for reading and writing to a file?**
    1. #include<iostream>
    2. **#include<fstream>**
    3. #include<file>
    4. None of the mentioned
53. **What does inheriatance allows you to do?**
54. create a class
55. **create a hierarchy of classes**
56. access methods
57. None of the above
58. **What should be the name of constructor?**
59. Same as object
60. Same as member
61. **Same as class**
62. None of the mentioned
63. **Operator overloading is:**
    1. Making C++ operators work with objects
    2. **Giving new meaning to existing C++ operators**
    3. Making new C++ operator
    4. Both a and b
64. **C++ requires every statement to end with a \_\_\_\_\_.**
65. :
66. ?
67. ,
68. **;**
69. **Which of the following parameter passing mechanism is/are supported by C++ but not in C?**
    1. Pass by value
    2. Pass by reference
    3. P ass by pointer
    4. **All of the above**
70. **A function with the same name as the class, but proceeded with a tilde character (~) is called \_\_\_\_\_ of that class.**
    1. constructor
    2. **destructor**
    3. function
    4. object
71. **In object oriented programming, by wrapping up characteristics and behavior into one unit, we achieve \_\_\_\_\_.**
72. data abstraction
73. **data encapsulation**
74. data hiding
75. all of the above
76. **Hiding the complexity is known as \_\_\_\_\_.**
    1. **abstraction**
    2. encapsulation
    3. data hiding
    4. composition
77. **Which of the following statement is correct?**
    1. **The order of the default argument will be right to left.**
    2. The order of the default argument will be left to right.
    3. The order of the default argument will be alternate.
    4. The order of the default argument will be random.
78. **The \_\_\_\_\_ access specifier allows functions or data to be accessible to other parts of the program.**
    1. private
    2. protected
    3. **public**
    4. inherited
79. **Which of the following is a correct way of writing comment?**
    1. **\*/ Comments \*/**
    2. \*\* Comment \*\*
    3. /\* Comment \*/
    4. { Comment }
80. **Which keyword is used to access the variable in namespace?**
    1. **Using**
    2. Dynamic
    3. Const
    4. Static
81. **What is the mandatory preprocessor directive for c++?**
    1. #define
    2. #**include**
    3. #undef
    4. none of the mentioned
82. **Which of the following operator can be overloaded?**
    1. .
    2. &
    3. Size of operator
    4. ?
83. **Which of the following operator is overloaded for object cout?**
84. >>
85. <<
86. +
87. =
88. **Which of the following is not a type of inheritance?**
89. Multiple
90. Multilevel
91. Distributive
92. Hierarchical
93. **Which of the following access specifies is used in a class definition by default?**
94. Protected
95. Public
96. Private
97. Friend
98. **Constructor is executed when \_\_\_\_\_.**
99. **an object is created**
100. an object is used
101. a class is declared
102. an object goes out of scope

**SECTION B**

**Short Answer Questions**

**Attempt any five (5) questions out of eight (8) questions (5\*6=30)**

* + 1. Define OOP and describe the features of OOP.(2+4)
    2. Write a program to read the contents of a text file and display them on the screen using appropriate method.
    3. Define Multithreading with an example.
    4. Write a program to input length and breadth of a rectangle and find the area of the rectangle using passing by value method. (3+3)
    5. Elucidate Operator. Discuss different types of operator.(2+4)
    6. Write a program to write data in a file using appropriate method.
    7. Explain for loop. Write a program to display odd numbers from 1 to 19 using for loop. (1+5)
    8. Explain cin and cout objects with examples.

**SECTION C**

**Long Answer Questions**

**Attempt any two (2) questions out of three (3) questions (2\*20=40)**

* + 1. Define constructor. Explain default constructor and parameterized constructors with examples. (4+16)
    2. Explain selection structure with example. Write a program that takes marks in five subjects and finds out total and percent. The full marks are 100 in each subject. Find grade according to the given criteria: (5+15)

Percent >=90 to 100, A

Percent>=80 and percent <90, B

Percent>=70 and percent <80, C

Percent>=60 and percent <70, D, otherwise E

* + 1. Explain array. Write a program to input any ten numbers pass these numbers to a function that returns the total of these numbers. (6+14)

**\*\*\*\*\*BEST OF LUCK\*\*\*\***