

Roll No.-----

<b>Paper Code</b>		
<b>3</b>	<b>6</b>	<b>3</b>
(To be filled in the OMR Sheet)		

प्रश्नपुस्तिका क्रमांक  
Question Booklet No.

O.M.R. Serial No.

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प्रश्नपुस्तिका सीरीज  
Question Booklet Series  
**B**

## BCA (Second Semester) Examination, July-2022

### BCA-2001

### Object Oriented Programming Using C++

Time : 1:30 Hours

Maximum Marks-100

जब तक कहा न जाय, इस प्रश्नपुस्तिका को न खोलें

- K-363**
- निर्देश : -
1. परीक्षार्थी अपने अनुक्रमांक, विषय एवं प्रश्नपुस्तिका की सीरीज का विवरण यथास्थान सही- सही भरे, अन्यथा मूल्यांकन में किसी भी प्रकार की विसंगति की दशा में उसकी जिम्मेदारी स्वयं परीक्षार्थी की होगी।
  2. इस प्रश्नपुस्तिका में 100 प्रश्न हैं, जिनमें से केवल 75 प्रश्नों के उत्तर परीक्षार्थियों द्वारा दिये जाने हैं। प्रत्येक प्रश्न के चार वैकल्पिक उत्तर प्रश्न के नीचे दिये गये हैं। इन चारों में से केवल एक ही उत्तर सही है। जिस उत्तर को आप सही या सबसे उचित समझते हैं, अपने उत्तर पत्रक (O.M.R. ANSWER SHEET) में उसके अक्षर वाले वृत्त को काले या नीले बाल प्वाइंट पेन से पूरा भर दें। यदि किसी परीक्षार्थी द्वारा किसी प्रश्न का एक से अधिक उत्तर दिया जाता है, तो उसे गलत उत्तर माना जायेगा।
  3. प्रत्येक प्रश्न के अंक समान हैं। आप के जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
  4. सभी उत्तर केवल ओ०एम०आर० उत्तर पत्रक (O.M.R. ANSWER SHEET) पर ही दिये जाने हैं। उत्तर पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
  5. ओ०एम०आर० उत्तर पत्रक (O.M.R. ANSWER SHEET) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाय।
  6. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी ओ०एम०आर० शीट उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें।
  7. निगेटिव मार्किंग नहीं है।
- महत्वपूर्ण : - प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्नपुस्तिका के सभी पृष्ठ भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्ष निरीक्षक को दिखाकर उसी सीरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।



1. The operators can't be overloaded :
  - (A) Binary operators
  - (B) Unary operators
  - (C) Ternary operator
  - (D) None
  
2. A friend function for unary operator overloading takes \_\_\_\_\_ arguments.
  - (A) Zero
  - (B) One
  - (C) Two
  - (D) None
  
3. A friend function for binary operator overloading takes \_\_\_\_\_ arguments.
  - (A) Zero
  - (B) One
  - (C) Two
  - (D) None
  
4. The variable that contains the address of constant or variable :
  - (A) Function
  - (B) Array
  - (C) Pointer
  - (D) Structure
  
5. The memory management operator in c++ :
  - (A) New & delete
  - (B) Malloc
  - (C) Calloc
  - (D) Free

6. The pointer refers to an object that has called the member function currently :
- (A) This
  - (B) Address
  - (C) Virtual function
  - (D) None
7. The empty virtual function are called :
- (A) Pure / do nothing
  - (B) Virtual table
  - (C) Polymorphism
  - (D) Virtual base class
8. A stream of byte that is the interface between IO and IO devices :
- (A) Streams
  - (B) Class
  - (C) Object
  - (D) File
9. The class that derived from standard library ios contain input functions :
- (A) Ios
  - (B) iostream
  - (C) istream
  - (D) ostream
10. The class that derived from standard library ios contain output functions :
- (A) Ios
  - (B) iostream
  - (C) istream
  - (D) ostream

11. Which function is in the ostream class :
  - (A) get()
  - (B) read()
  - (C) write
  - (D) cin
12. Which function is in the istream class :
  - (A) get()
  - (B) put()
  - (C) write
  - (D) cout
13. The standard library inherited from istream & ostream :
  - (A) ios
  - (B) iostream
  - (C) ifstream
  - (D) ofstream
14. The function used to receive one character at a time :
  - (A) get()
  - (B) put()
  - (C) getline()
  - (D) write()
15. The function used to display one character at a time :
  - (A) get()
  - (B) put()
  - (C) getline()
  - (D) write()

16. The function used to receive one line at a time :
- (A) get()
  - (B) put()
  - (C) getline()
  - (D) write()
17. The function used to display one line at a time :
- (A) get()
  - (B) put()
  - (C) getline()
  - (D) write()
18. \_\_\_\_\_ are the reserved words of the programming language.
- (A) Tokens
  - (B) Literals
  - (C) Separators
  - (D) Keywords
19. \_\_\_\_\_ refer to the names of variables, functions, arrays, classes, etc.
- (A) Identifiers
  - (B) Operators
  - (C) Punctuators
  - (D) Manipulators
20. Write the range of value of the data type 'char' :
- (A) 0 to 128
  - (B) 0 to 255
  - (C) -255 to 255
  - (D) -128 to 127

21. A \_\_\_\_\_ is the name of the storage location :
- (A) Identifier
  - (B) Variable
  - (C) Keyword
  - (D) Token
22. Array indexing always starts with the number :
- (A) 0
  - (B) 1
  - (C) 2
  - (D) \0
23. We declare a function with \_\_\_\_\_ if it does not have any return type.
- (A) Long
  - (B) Double
  - (C) Void
  - (D) Int
24. Which of the following is selection statement in C++ ?
- (A) break
  - (B) goto
  - (C) exit
  - (D) switch
25. Which of the following is a correct comment ?
- (A) `*/ Comments */`
  - (B) `** Comment **`
  - (C) `/* Comment */`
  - (D) `{ Comment }`

26. To increase the value of `c` by one which of the following statement is wrong ?
- (A) `c++;`
  - (B) `c = c + 1;`
  - (C) `c + 1 => c;`
  - (D) `c += 1`
27. When following piece of code is executed, what happens ? `b = 3; a = b++;` ?
- (A) A contains 3 and b contains 4
  - (B) A contains 4 and b contains 4
  - (C) A contains 4 and b contains 3
  - (D) A contains 3 and b contains 3
28. How many times is a do while loop guaranteed to loop ?
- (A) 0
  - (B) Infinitely
  - (C) 1
  - (D) Variable
29. Which of the following is not a valid relational operator ?
- (A) `==`
  - (B) `=>`
  - (C) `>=`
  - (D) `>=`
30. Strings are character arrays. The last index of it contains the null-terminated character :
- (A) `\n`
  - (B) `\t`
  - (C) `\0`
  - (D) `\1`

31. What will be the values of x, m and n after the execution of the following statements ?
- ```
Int x, m, n; m = 10; n = 15; x = ++m + n++;
```
- (A) x=25, m=10, n=15  
(B) x=26, m=11, n=16  
(C) x=27, m=11, n=16  
(D) x=27, m=10, n=15
32. Consider the following statements : `int x = 22, y=15; x = (x>y) ? (x+y) : (x-y);`  
What will be the value of x after executing these statements ?
- (A) 22  
(B) 37  
(C) 7  
(D) Error. Cannot be executed
33. Which of the following keywords is used to control access to a class member ?
- (A) Default  
(B) Break  
(C) Protected  
(D) Asm
34. Which of the following means “The use of an object of one class in definition of another class” ?
- (A) Encapsulation  
(B) Inheritance  
(C) Composition  
(D) Abstraction
35. A derived class is also called a \_\_\_\_\_.
- (A) Small class  
(B) Subclass  
(C) Noticeable class  
(D) Big class

36. Which of these inheritances is shown in case we inherit some base class from another class, then one of the classes derives it ?
- (A) Single
  - (B) Multiple
  - (C) Multi-level
  - (D) Hierarchical
37. \_\_\_\_\_ is the universal handler class for exceptions.
- (A) Maths
  - (B) Object
  - (C) Exceptions
  - (D) Errors
38. Conversion of data type is called :
- (A) Self referencing
  - (B) Type casting
  - (C) Virtual function
  - (D) Abstract class
39. The function contain in the ios class to set width :
- (A) width()
  - (B) precision()
  - (C) fill()
  - (D) setf()
40. The function contain in the class iomanip to set width :
- (A) setw()
  - (B) set precision()
  - (C) set fill()
  - (D) setiosflags()

41. How many default constructors per class are possible ?
- (A) Only one
  - (B) Two
  - (C) Three
  - (D) Unlimited
42. How many times a constructor is called in the life-time of an object ?
- (A) Only once
  - (B) Twice
  - (C) Thrice
  - (D) Depends on the way of creation of object
43. The mechanism of deriving one base class with more than one derived classes :
- (A) Multilevel inheritance
  - (B) Multiple inheritance
  - (C) Hybrid inheritance
  - (D) Hierarchical inheritance
44. Which of the following is not correct :
- (A) Only existing operator can be overloaded
  - (B) The overloaded operator must have at least one operand
  - (C) We can change the basic meaning of the operator
  - (D) Overloaded operators follow the syntax rule of original operator
45. A member function for unary operator overloading takes \_\_\_\_\_ arguments.
- (A) Zero
  - (B) One
  - (C) Two
  - (D) None

46. Which of the following function / type of function cannot be overloaded ?
- (A) Member function
  - (B) Static function
  - (C) Virtual function
  - (D) Both (B) and (C)
47. Copy constructor must receive its arguments by \_\_\_\_\_.
- (A) Either pass-by-value or pass-by-reference
  - (B) Only pass-by-value
  - (C) Only pass-by-reference
  - (D) Only pass by address
48. The break statement causes an exit :
- (A) From the innermost loop only
  - (B) Only from the innermost switch
  - (C) From all loops & switches
  - (D) From the innermost loop or switch
49. The arrays of variable that are of the type class :
- (A) Array of object
  - (B) Pointer
  - (C) Object
  - (D) Structure
50. Which of the following type of data member can be shared by all instances of its class ?
- (A) Public
  - (B) Inherited
  - (C) Static
  - (D) Friend

51. In object oriented Programming the program is divided into \_\_\_\_\_.
- (A) Class
  - (B) Object
  - (C) Function
  - (D) None of these
52. Which one is the Object Oriented Programming language ?
- (A) Cobol
  - (B) C
  - (C) C++
  - (D) Both C & C++
53. The wrapping up of data and functions into a single unit is called \_\_\_\_\_.
- (A) Inheritance
  - (B) Encapsulation
  - (C) Data hiding
  - (D) Polymorphism
54. The process by which objects of one class acquire the properties of objects of another class is called \_\_\_\_\_.
- (A) Abstraction
  - (B) Inheritance
  - (C) Encapsulation
  - (D) Polymorphism
55. In OOP which concept provides the idea of reusability :
- (A) Inheritance
  - (B) Encapsulation
  - (C) Data hiding
  - (D) Polymorphism

56. The process of making an operator to exhibit different behaviours in different instances is called \_\_\_\_\_.
- (A) Function overloading
  - (B) Operator overloading
  - (C) Inheritance
  - (D) None of these
57. The process of making a function to exhibit different behaviours in different instances is called \_\_\_\_\_.
- (A) Function overloading
  - (B) Operator overloading
  - (C) Inheritance
  - (D) None of these
58. Objects communicate with one another by using \_\_\_\_\_.
- (A) Message passing
  - (B) Operator overloading
  - (C) Inheritance
  - (D) Both (A) & (B)
59. Through \_\_\_\_\_ we can eliminate redundant code and extend the use of existing class.
- (A) Inheritance
  - (B) Operator overloading
  - (C) Encapsulation
  - (D) Both (A) & (B)
60. The \_\_\_\_\_ principle helps the programmer to build secure programs.
- (A) Operator overloading
  - (B) Encapsulation
  - (C) Data hiding
  - (D) Polymorphism

61. What are the basic run time entities in an object oriented program ?
- (A) Objects
  - (B) Functions
  - (C) Datas
  - (D) None of these
62. OOPs follows \_\_\_\_\_ approach during program design.
- (A) Top down
  - (B) Bottom-up
  - (C) Both (A) & (B)
  - (D) None of these
63. The technique of Hiding internal details in an object is called \_\_\_\_\_.
- (A) Encapsulation
  - (B) Functions
  - (C) Abstraction
  - (D) Inheritance
64. Classes are \_\_\_\_\_ datatype.
- (A) Derived
  - (B) User-defined
  - (C) Built-in
  - (D) Both (A) & (C)
65. \_\_\_\_\_ provides interface between the object's data and program.
- (A) Object
  - (B) Functions
  - (C) Class
  - (D) Polymorphism

66. \_\_\_\_\_ refers to the linking of procedure call to the code to be executed in response to the call.
- (A) Polymorphism
  - (B) Functions
  - (C) Dynamic binding
  - (D) Object
67. A \_\_\_\_\_ for an object is a request for execution of a procedure.
- (A) Object
  - (B) Functions
  - (C) Dynamic binding
  - (D) Message discuss
68. The << operator is known as \_\_\_\_\_.
- (A) Put to
  - (B) Get from
  - (C) Insertion
  - (D) Both (A) & (C)
69. The >> operator is known as \_\_\_\_\_.
- (A) Put to
  - (B) Get from
  - (C) Extraction
  - (D) Both (B) & (C)
70. \_\_\_\_\_ contains function prototype for the standard input and output functions.
- (A) iomanip.h
  - (B) iostream.h
  - (C) stdlib.h
  - (D) Both (A) & (B)

71. In C++ default return type for all the functions is \_\_\_\_\_.
- (A) Int
  - (B) Void
  - (C) Float
  - (D) None of these
72. The multiple use of input and output operator is called \_\_\_\_\_.
- (A) Polymorphism
  - (B) Inheritance
  - (C) Cascading
  - (D) None of these
73. Which of the following is not a feature of OOPs?
- (A) Polymorphism
  - (B) Inheritance
  - (C) Dynamic binding
  - (D) None of these
74. By default, the members of a C++ class are :
- (A) Private
  - (B) Public
  - (C) Protected
  - (D) None of these
75. Which of the following function that must contain in all C++ Programs :
- (A) start()
  - (B) system()
  - (C) main()
  - (D) program()

76. Which one of the following is the correct operator to compare two values :
- (A) :=
  - (B) =
  - (C) Equal
  - (D) ==
77. C++ is originally developed by :
- (A) Nicolas Wirth
  - (B) Dennis Ritchi
  - (C) Bjarne Stroustrup
  - (D) Ken Thompson
78. Identify the unary operator :
- (A) ? , :
  - (B) ++
  - (C) +
  - (D) %
79. The \_\_\_\_\_ are used to check the relationship between two numeric operands or expressions.
- (A) Logical operators
  - (B) Relational operators
  - (C) Arithmetic operators
  - (D) Bitwise operators
80. \_\_\_\_\_ is a function that is expanded in line when it is invoked.
- (A) Library function
  - (B) User defined function
  - (C) Inline function
  - (D) None of these

81. The qualifier \_\_\_\_\_ tells the compiler that the function should not modify the argument.
- (A) Const
  - (B) Static
  - (C) Constant
  - (D) Inline
82. \_\_\_\_\_ refers to the use of the same thing for different purpose.
- (A) Function declaration
  - (B) Overloading
  - (C) Function calling
  - (D) Prototyping
83. The functions declared inside the class is known as \_\_\_\_\_.
- (A) Data members
  - (B) Library functions
  - (C) Member functions
  - (D) User defined functions
84. Calling a member function by using its name from another member function of the same class is known as \_\_\_\_\_.
- (A) Grouping of member function
  - (B) Member function group
  - (C) Nesting of member function
  - (D) Nested group of member function
85. \_\_\_\_\_ function can only be called by another function that is a member of its class.
- (A) Member function
  - (B) Private member function
  - (C) Nested member function
  - (D) Public member function

86. \_\_\_\_\_ are normally used to maintain values common to the entire class.
- (A) Dynamic variables
  - (B) Static variables
  - (C) Private variables
  - (D) Public variables
87. A static variable is initialized to \_\_\_\_\_ when the first object of its class is created.
- (A) 1
  - (B) Null
  - (C) 0
  - (D) None of these
88. A function calling itself :
- (A) Inline function
  - (B) Static function
  - (C) Friend function
  - (D) Recursion
89. Which of the following is not a type of constructor ?
- (A) Copy constructor
  - (B) Friend constructor
  - (C) Default constructor
  - (D) Parameterized construct
90. Constructor is executed when \_\_\_\_\_.
- (A) An object is created
  - (B) An object is used
  - (C) A class is declared
  - (D) An object goes out of scope

91. Which of the following also known as an instance of a class ?
- (A) Friend functions
  - (B) Object
  - (C) Member functions
  - (D) Member Variables
92. A constructor that accepts \_\_\_\_\_ parameters is called the default constructor.
- (A) One
  - (B) Two
  - (C) No
  - (D) Three
93. Destructor has the same name as the constructor and it is preceded by \_\_\_\_\_.
- (A) !
  - (B) ?
  - (C) ~
  - (D) \$
94. Which constructor function is designed to copy objects of the same class type ?
- (A) Create constructor
  - (B) Object constructor
  - (C) Dynamic constructor
  - (D) Copy constructor
95. Which of the following statement is correct ?
- (A) A constructor has the same name as the class in which it is present
  - (B) A constructor has a different name than the class in which it is present
  - (C) A constructor always returns an integer
  - (D) A constructor cannot be overloaded

96. A destructor takes \_\_\_\_\_ arguments.
- (A) One
  - (B) Two
  - (C) Three
  - (D) No
97. Destructor calls are made in which order of the corresponding constructor calls ?
- (A) Reverse order
  - (B) Forward order
  - (C) Depends on how the object is constructed
  - (D) Depends on how many objects are constructed
98. Which allows you to create a derived class that inherits properties from more than one base class ?
- (A) Multilevel inheritance
  - (B) Multiple inheritance
  - (C) Hybrid inheritance
  - (D) Hierarchical inheritance
99. A derived class with only one base class :
- (A) Multilevel inheritance
  - (B) Multiple inheritance
  - (C) Single inheritance
  - (D) Hierarchical inheritance
100. The duplication of inherited members due to the multiple paths can be avoided by making a common base class is called :
- (A) Abstract class
  - (B) Virtual base class
  - (C) Multiple inheritance
  - (D) Nesting of classes

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## **Rough Work / रफ कार्य**

**DO NOT OPEN THE QUESTION BOOKLET UNTIL ASKED TO DO SO**

1. Examinee should enter his / her roll number, subject and Question Booklet Series correctly in the O.M.R. sheet, the examinee will be responsible for the error he / she has made.
  2. **This Question Booklet contains 100 questions, out of which only 75 Question are to be Answered by the examinee. Every question has 4 options and only one of them is correct. The answer which seems correct to you, darken that option number in your Answer Booklet (O.M.R ANSWER SHEET) completely with black or blue ball point pen. If any examinee will mark more than one answer of a particular question, then the answer will be marked as wrong.**
  3. Every question has same marks. Every question you attempt correctly, marks will be given according to that.
  4. Every answer should be marked only on Answer Booklet (O.M.R ANSWER SHEET). Answer marked anywhere else other than the determined place will not be considered valid.
  5. Please read all the instructions carefully before attempting anything on Answer Booklet (O.M.R ANSWER SHEET).
  6. After completion of examination, please hand over the O.M.R. SHEET to the Examiner before leaving the examination room.
  7. There is no negative marking.
- Note:** On opening the question booklet, first check that all the pages of the question booklet are printed properly in case there is an issue please ask the examiner to change the booklet of same series and get another one.