

OBJECT ORIENTED PROGRAMMING IN C++

For Off Campus BSc Computer Science Programme

UNIT 1

1. The goal of programmers is to develop software that are_____.

- A. Correct
- B. Reliable and maintainable
- C. Satisfy all the user requirements

D. All of the above

2. Software development is not a _____ process:

A. Complicated

B. Static

C. Simple

D. None of the above

3. What describes the structure of a program?

- A. Programming paradigm
- B. Programming methodology

C. Both (a) and (b)

D. None of the above

4. Initially, when the computers were invented, what was used to write the programs?

- A. FRONTAN
- B. BASIC

C. Binary program

D. None of the above

5. Any software needs to be modified or redesigned according to change in_____:

- A. User requirements
- B. Business rules
- C. Strategies

D. All of the above

6. Then the assembly language was invented to write large programs, however, it was also not_____.

- A. Interesting
- B. Easy

C. User friendly

D. None of the above

7. With the change in the user requirements, the size and the complexity of the programs continued to grow, which led to the development of high-level languages, such as

A. FRONTAN

B. BASIC

C. Both (a) and (b)

D. Binary language

8. In unstructured programming paradigm, all the instructions of a program were written one after the other in a single function and hence, suitable for writing only_____.

A. Small programs

B. Simple programs

C. Large and simple programs

D. Both (a) and (b)

9. For large and complex programs, it became difficult to_____.

A. Trace and debug errors

B. Write programs

C. Bug errors

D. None of the above

10. To overcome the limitations of unstructured programming paradigm, which other programming paradigms were developed?

A. Procedural programming paradigms (PPP)

B. Object-oriented programming paradigms (OOP)

C. Both (a) and (b)

D. Software programming paradigms

11. Which paradigm has revolutionized the process of software development?

A. Software programming

B. OOP

C. PPP

D. None of the above

12. The most important feature is that OOP divides the program into a number of_____.

A. Functions

B. Software

C. Objects

D. None of the above

13. An object is a unit of structural and behavioral modularity that contains a set of_____.

A. Properties

B. Data

C. Associated functions

D. All of the above

14. What does OOP emphasizes on?

A. Functions

B. Data

C. Procedures

D. None of the above

15. _____are the small, self-contained and modular units with a well-defined boundary.

A. Objects

B. Data

C. Classes

D. Abstractions

16. What is defined as a user-defined data type which contains the entire set of similar data and the functions that the objects possess?

A. Inheritance

B. Encapsulation

C. Class

D. None of the above

17. Encapsulation is the technique of binding or keeping the _____-(that operate on them) together in a single unit called a class.

A. Data

B. Functions

C. Objects

D. Both (a) and (b)

18. Polymorphism is a _____ word.

A. French

B. Latin

C. Greek

D. English

19. In C++, polymorphism can be achieved either at_____.

A. Compile time

B. Run-time

- C. Both (a) and (b)
- D. Virtual functions

20. What is the process of interacting between different objects in a program called?

- A. Abstract classes
- B. Message passing
- C. Concrete classes
- D. Encapsulation

UNIT 2

21. In any programming language, writing even an elementary program requires the knowledge and clear understanding of _____.

- A. Data types
- B. Variables and constants
- C. Operators

D. All of the above

22. A character set can be defined as a set of characters that _____ represents information.

- A. Individually or in combination
- B. In combination
- C. Do not

D. Both (a) and (b)

23. When a program is compiled, what scans the source code and parses it into tokens to find the syntax errors?

- A. Data types

B. Compiler

- C. Horizontal tab
- D. None of the above

24. _____ are the predefined words that have special significance in any language.

- A. Variables
- B. Data types
- C. Constants

D. Keywords

25. Every keyword is reserved for a specific purpose and hence must not be used as _____.

- A. User-defined names
- B. Identifiers
- C. Plain

D. Both (a) and (b)

26. Identifiers are the names given to uniquely identify various programming elements like _____.

- A. Variables and arrays
- B. Functions and classes

C. Structures and namespaces

D. All of the above

27. An identifier must contain only_____.

A. Upper case and lower case letters

B. Underscore character (_) or digits 0 to 9

C. Both (a) and (b)

D. None of the above

28. What should an identifier start with?

A. Letter

B. Underscore

C. Letter or underscore

D. Digits 0 to 9

29. Identifiers that start with a double underscore ‘__’ or an underscore followed by an upper case letter must be avoided as these names are reserved by the_____.

A. Standard C++ Library

B. Standard C Library

C. C++ Library

D. None of the above

30. Numeric constants refer to the numbers consisting of a sequence of digits (with or without decimal point) that can be_____.

A. Positive

B. Negative

C. Alphanumeric

D. Both (a) and (b)

31. In to how many categories can C++ constants be broadly classified into?

A. Four

B. Two

C. Three

D. Multiple

32. There are few character constants that cannot be included in a program directly through a keyboard, such as_____.

A. Backspace

B. Newline

C. Both (a) and (b)

D. Insert

33. Wide character literal uses how many bytes of memory?

A. Two

B. One

C. Multiple

D. None of the above

34. A data type determines the _____ that can be performed on the data.

A. Type

B. Operations

C. Memory

D. Both (a) and (b)

35. What is termed as a set of named integer constants that specify all the permissible values that can be assigned to enumeration variables?

A. Enumeration

B. Reference

C. Pointer

D. None of the above

36. What forms an expression?

A. Variables

B. Constants

C. Operators

D. All of the above

37. The expressions that produce a bool type value, that is, either true or false are called_____.

A. Integral expressions

B. Float expressions

C. Relational or Boolean expressions

D. Constant expressions

38. The statements that cause a set of statements to be executed repeatedly either for a specific number of times or until some condition is satisfied are known as_____.

A. Iteration statements or loops

B. Conditional operator

C. The if-else statement

D. The if statement

39. The bool data type can hold only boolean values that is either true or false, where true represents _____ and false represents _____.

A. 0,-1

B. 0,1

C. 1, 0

D. None of the above

40. In addition to char data type, C++ provides another data type wchar_t which is used to store _____ wide characters.

A. 10 bit

B. 32 bit

C. 16 bit

D. 64 bit

41. Which variable stores the memory address of another variable?

A. Reference

B. Pointer

C. Array

D. None of the above

42. What are the significant features of C language?

A. Structure and union

B. Class

C. Enumerations

D. None of the above

43. If a variable is used prior to its initialization, what is produced?

A. Garbage results

B. Undesirable results

C. Both (a) and (b)

D. 10

44. The expressions that produce a bool type value after combining two or more relational expressions are called _____.

A. Logical expressions

B. Big Theta $\theta(f)$

C. Boolean expressions

D. None of the above

45. _____ is an assignment expression, which is enclosed within other assignment expression.

- A. Chained assignment
- B. Binary arithmetic operator
- C. Compound assignment

D. Embedded assignment

46 Like built-in data types, memory can also be allocated dynamically to derived and userdefined data types such as_____.

- A. Arrays
- B. Structures
- C. Classes

D. All of the above

47. A single statement specifies a single action and is always terminated by a_____.

- A. Inverted commas
- B. Colon

C. Semi colon

D. Brackets

48. The for loop is one of the most widely used loops in_____.

A. C++

B. C

C. Iterations

D. None of the above

49. The break statement is extensively used in_____.

- A. Loops
- B. switch statements

C. Both (a) and (b)

D. continue statement

UNIT 3

50. Handling real world data requires a mechanism that deals with a collection of_____?

A. Structures

B. Data items

C. Arrays

D. None of the above

51. _____ is defined as a fixed size sequence of same type of data elements.

A. C++

B. Data items

C. Arrays

D. None of the above

52. What is the simplest form of an array?

A. One- dimensional array

B. Multi- dimensional array

C. Single- dimensional array

53. If more than one subscript is used, an array is known as a_____.

A. One- dimensional array

B. Single dimensional array

C. Multi- dimensional array

D. None of the above

54. The memory address of the first element of an array is contained in the _____.

A. Next array

B. Computer program

C. Name of the array

D. None of the above

55. Each element in an array is associated with a unique subscript value, starting from_____:

A. 1 to size-1

B. 0 to size-1

C. -1 to size-0

D. None of the above

56. Once the array elements are accessed, a number of operations can be performed on them. These operations include_____.

A. Finding the sum or average

B. Maximum or minimum

C. Sorting and searching of the array elements

D. All of the above

57. A programmer can access a particular element of an array by using one or more_____

A. Indices

B. Subscripts

C. Single-dimensional array

D. Both (a) and (b)

58. Some of the common operations that can be performed on a two-dimensional array include finding the sum of_____.

A. Row elements

B. Column elements and diagonal elements

C. Finding the maximum and minimum values

D. All of the above

59. The syntax for declaring a single-dimensional array is:

A. `data_type array_name[size]`

B. `int marks[5]={51,62,43,74,55};`

C. `data_type array_name[size];`

D. None of the above

60. An array can be initialized in how many ways?

A. Two

B. Three

C. One

D. None of the above

61. Multi-dimensional arrays can be described as_____.

A. Arrays of arrays

B. Arrays

C. Strings

D. None of the above

62. What is known as an index?

A. Character array

B. String

C. Subscript

D. None of the above

UNIT 4

63. How does function help programs?

A. Makes programs easy to manage

B. Makes programs easy to read

C. Both (a) and (b)

D. Makes programs easy to write

64. Functions are _____ named groups of statements that are aimed at accomplishing a specific task or action in the program.

A. Self-contained

B. Well-defined

C. User-defined

D. Both (a) and (b)

65. The division of a program into various functions not only enhances the _____ of the program, but also eases the debugging process.

A. Specific task or action

B. Grouping of statements

C. Readability and maintainability

D. None of the above

66. What is used to combine particular set of instructions that needs to be accessed repeatedly in a program?

A. Array

B. String

C. Function

D. None of the above

67. The library function strcat() is commonly used in the _____ programs to concatenate two strings.

A. Two

B. Java

C. C

D. C++

68. A function declaration is also known as _____.

A. C++ standard library

B. Variable

C. Function prototype

D. None of the above

69. Function prototype provides _____ for a function that informs the C++ compiler about the return type, the function name, and the number and data type of the arguments passed to the function.

A. Model

B. Blueprint

C. Both (a) and (b)

D. None of the above

70. A function accepts a _____ number of parameters.

A. Multiple

B. Limited

C. Variable

D. Fixed

71. A function definition contains the _____ that specifies the actions to be performed.

A. Parameters

B. Variable

C. Code

D. None of the above

72. What does C++, the function definition comprise of?

A. Function header

B. Function body

C. Both (a) and (b)

D. Function statement

73. Function header must contain the same _____ in the same order as the function prototype.

A. Return type

B. Function name

C. Parameter list

D. All of the above

74. A function header cannot be terminated by a_____.

A. Exclamation

B. Comma

C. Colon

D. Semicolon

75. The definition of the function can appear either _____.

- A. Before main()
- B. After main()

C. Both (a) and (b)

D. None of the above

76. In order to use a function in different parts of a program, the function must be _____.

- A. Defined
- B. Declared

C. Called or invoked

D. None of the above

77. What doesn't a function call specify?

- A. Return type of the arguments
- B. Data types of the arguments

C. Both (a) and (b)

D. None of the above

78. The function that calls another function is known as the _____ and the function that is being called is known as the _____.

- A. Called function, calling function
- B. Traversing, traversed

C. Calling function, called function

D. None of the above

79. By default, functions are called by value in _____.

A. C

B. C++

C. Programs

D. None of the above

80. If the user wants the value of an argument to be intact throughout the function then such arguments must be declared as _____.

A. Constants

B. Reference

C. Call by value

D. Minus one

UNIT 5

81. Representing various real-world objects as program elements is one of the key objectives of _____.

A. Object-oriented programming

B. Java

C. C++

D. C

82. In C++, this objective is accomplished with the help of two _____.

A. User-defined data types

B. Structures

C. Classes

D. All of the above

83. What binds data and functions together under a single entity?

A. C++ structures

B. Class

C. Both (a) and (b)

D. None of the above

84. C++ structures and classes are _____ in terms of their functionality.

A. Identical

B. Different

C. Entwined

D. None of the above

85. A class serves as a template that provides a layout common to all of its instances, known as _____.

A. Classes

B. Structures

C. Objects

D. None of the above

86. _____ is a user-defined data type that binds data and the functions that operate on the data together in a single unit.

A. Class

B. Structures

C. Objects

D. None of the above

87. Members of a class cannot be declared with the _____ keywords.

A. Auto

B. Extern

C. Register

D. All of the above

88. The keywords _____ are known as access specifiers (also known as visibility mode).

A. Private

B. Public

C. Protected

D. All of the above

89. The relation between an object and a class is same as that of a _____.

A. Variable and its data type

B. Function and its data type

C. Object and its data type

D. None of the above

90. Since an object is an instance of a class, the process of declaring an object of a class is known as _____.

A. Inline function

B. Instantiation

C. Built-in data types

D. None of the above

91. Arrays can be declared as the members of a _____.

A. Class

B. Queue

C. String

D. None of the above

92. The arrays can be declared as _____ members of the class.

A. Private

B. Public

C. Protected

D. All of the above

93. The objects of a class can be passed as arguments to member functions as well as nonmember functions by_____.

A. Value

B. Reference

C. Both (a) and (b)

D. None of the above

94. In how many situations can friend function be generally used?

A. Two

B. Three

C. One

D. None of the situations

95. In C++, a class can simultaneously have a_____.

A. Default constructor

B. Parameterized constructor

C. Copy constructor

D. All of the above

96. When an object is initialized with an overloaded constructor, the compiler determines which constructor is to be called based on the number_____.

A. Order

B. Order of the parameters

C. Both (a) and (b)

D. None of the above

97. The constructor and the destructor of a class are automatically invoked when memory is allocated and de-allocated to an_____.

A. Data type

B. Copy constructor

C. Object

D. None of the above

98. The public members of a class can be accessed outside the class directly using the_____.

A. Object name

B. Dot operator

C. Both (a) and (b)

D. Memory space

UNIT 6

99. C++ permits to perform all the _____operations on the objects of a class in the same way as these are performed on simple variables.

- A. Arithmetic
- B. Logical
- C. Overloading

D. Both (a) and (b)

100. Which process enables an operator to exhibit different behavior, depending on the data being provided?

- A. Operator overloading**
- B. Object overloading
- C. Built in-data types
- D. None of the above

101. An operator is overloaded with the help of a special function called an_____.

- A. Operator function**
- B. Operator overloading
- C. Dot operator (.)
- D. None of the above

102. An operator can be overloaded either using_____.

- A. Member functions
- B. Friend functions
- C. Both (a) and (b)**
- D. Operator function

103. If the member operator function is defined outside the class, it has to be first declared inside the_____.

- A. Class**
- B. Object
- C. Program
- D. None of the above

104. The parameter_list has no arguments for unary operators, except for what?

- A. Postfix forms of ++

B. — operators

C. Both (a) and (b)

D. Function body

105. Which forms does C++ enable to overload?

A. Prefix

B. Postfix

C. Both (a) and (b)

D. None of the above

106. If the overloaded functions for ++ and — operators have return type void, then they cannot be used in an_____.

A. Expressions

B. Assignment statement

C. Overloading increment

D. Both (a) and (b)

107. On how many operands do binary operators operate on?

A. Two

B. Three

C. Four

D. One

108. How many types of type conversions in an expression involving user-defined data types can be there?

A. Three

B. Four

C. Two

D. None

109. When one class type is to be converted into another class type, the class type (object) that appears on the right-hand side is known as_____.

A. Source class

B. Destination class

C. Casting operator function

D. None of the above

110. Which keyword is used to overload an operator?

A. operator

B. explicit call

C. operator float

D. None of the above

111. The conversion function cannot have an argument list or a _____.

A. Return type

B. Basic type

C. Class type

D. None of the above

112. If the data members of the class need to be incremented or decremented by some value other than 1, then instead of overloading the postfix forms of increment or decrement operators, the _____ can be overloaded.

A. Shorthand operators (+= and -=)

B. Overloading binary operators

C. Conversion function

D. None of the above

UNIT 7

113. Which is one of the major strengths of object-oriented programming?

A. Logic

B. Inheritance

C. Memory

D. None of the above

114. The logical relationship between classes is achieved by_____.

A. Inheritance

B. Virtual base classes

C. Derived classes

D. None of the above

115. Inheritance facilitates a class to acquire the _____ of the existing class.

A. Properties

B. Functionality

C. Both (a) and (b)

D. None of the above

116. In inheritance, the class which is inherited by the new class is known as_____.

A. Base class

B. Superclass

C. Parent

D. All of the above

117. The class which inherits the members of the existing class is known as_____.

A. Derived class

B. Sub class

C. Child class

D. All of the above

118. The private members are accessed indirectly using the protected and the public member functions of the _____.

A. Sub class

B. Base class

C. Derived class

D. None of the above

119. Depending on the access specifiers public, protected or private, a base class can be_____.

- A. Publicly inherited
- B. Protectedly inherited
- C. Privately inherited
- D. All of the above**

120. When the access specifier of the base class in the derived class definition is public, the base class is _____.

- A. Publicly inherited**
- B. Protectedly inherited
- C. Privately inherited
- D. None of the above

121. When a base class is protectedly inherited, public and protected members of the base class are not accessible by the objects of the_____.

- A. Base class
- B. Derived class**
- C. Friend classes
- D. Member functions

122. By default, the access specifier of a base class in the derived class definition is_____.

- A. protected member
- B. perimeter
- C. private base_class
- D. private**

123. What is also allocated to the objects of a class?

- A. Array
- B. Memory**
- C. Variables
- D. None of the above

124. When a derived class inherits from a single base class, it is referred to as_____.

- A. Hybrid inheritance
- B. Multiple inheritances
- C. Single inheritance**
- D. Multi-level inheritance

125. The size of an object of the derived class is equal to the sum of the size of all the data members of the_____.

- A. Base class
- B. Derived class
- C. Both (a) and (b)**
- D. Virtual base class

126. When a derived class inherits from more than one base class simultaneously, it is referred to as _____.

- A. Hybrid inheritance
- B. Multiple inheritances**
- C. Single inheritance
- D. Multi-level inheritance

127. Multilevel inheritance comprises of how many levels?

- A. Only two
- B. Two or more**
- C. More than three
- D. None of the above

128. Virtual base class is an indirect base class declared using the keyword _____ in order to prevent its duplication.

- A. derived
- B. derived_class
- C. virtual**
- D. None of the above

129. What is required in inheritance to initialize the data members of the base class through derived class?

- A. Object declaration
- B. Destructor
- C. Constructor**
- D. Inheritance

130. What are used to dynamically initialize the object of the class?

- A. base class constructor
- B. Parameterized constructors**
- C. Destructor of the virtual base class
- D. None of the above

UNIT 8

131. Every program occupies some memory space during its_____.

A. Execution

B. Initialization

C. Implementation

D. None of the above

132. The addresses of which elements can be accessed in the program through the use of pointers, and are vital to C++ programming?

A. Variables

B. Literals

C. Both (a) and (b)

D. Pointers

133. Which features of C++ require the use of pointers?

A. Virtual functions

B. this pointer

C. Variables

D. Both (a) and (b)

134. A pointer is a variable that stores the address (not the value) of another_____.

A. Variable

B. Literal

C. Both (a) and (b)

D. None of the above

135. Like other variables, what else must be declared before using it in the program?

A. Data types

B. Literal variable

C. An asterisk '*'

D. Pointer variable

136. A pointer currently not pointing to any valid memory address can be initialized with_____.

A. NULL

B. 1

C. -1

D. None of the above

137. A pointer initialized with NULL is called a_____?

A. Reference operator

B. NULL pointer

C. Pointer variable ptr

D. None of the above

138. In C++, the reference operator (&) is used for how many distinct purposes?

A. Two

B. Three

C. Four

D. Multiple

139. Which unary operator is used with a pointer variable to 'indirectly' access the contents of the memory location pointed to by the pointer (that is dereferencing a pointer)?

A. Indirection operator

B. Dereference (*) operator

C. Both (a) and (b)

D. Pointer

140. The syntax for dereferencing a pointer variable is_____.

A. pointer-name

B. pointer_name

C. *pointer_name

D. None of the above

141. An expression that involves pointer variables and various arithmetic, relational and other operators, is known as a_____.

A. Pointer arithmetic

B. Dereferencing pointers

C. NULL pointer

D. None of the above

142. What is closely related to pointers?

A. Arrays

B. Nodes

C. Syntaxes

D. None of the above

143. Where is it important to distinguish while using asterisk (*) ?

A. Dereferencing pointers

B. Declaration of pointers

C. Both (a) and (b)

D. Pointer declaration

144. In addition to the array notation, pointer notation can be applied to characters in a C-string using a pointer of type_____.

A. float

B. int

C. char

D. long or double

145. Which special pointer contains the address of an object of a class currently calling the member function of the class?

A. this pointer

B. char (ename)

C. `class_name *pointer_name[size];`

D. None of the above

146. _____ are one of the attributes of C++ that support run-time polymorphism.

A. Pointers

B. Derived classes

C. Virtual functions

D. Heap tree

147. What stores the base addresses of all the virtual functions defined in the class?

A. V-table

B. Virtual table

C. Both (a) and (b)

D. Polymorphism

148. A virtual function having no definition within the base class is called_____.

A. Abstract classes

B. Pure virtual function

C. Virtual destructors

D. None of the above

149. A class that contains at least one pure virtual function is known as an_____.

A. Abstract class

- B. Pure abstract class
- C. Pure virtual functions
- D. Both (a) and (b)**

UNIT 9

150. Most real-life applications require large amount of input and output data to be handled that is difficult to manage using the commonly used console input/output (I/O) devices like_____.

- A. Keyboard
- B. Screen
- C. Mouse

D. Both (a) and (b)

151. With what type of devices can the C++ I/O system function?

- A. Terminals
- B. Disks
- C. Tape drives

D. All of the above

152. _____ refers to the flow of data in the form of sequence of bytes.

A. Stream

- B. C++ I/O system
- C. I/O operations
- D. All of the above

153. The streams help to consume data from which all sources?

- A. Keyboard
- B. Mouse
- C. Storage device

D. All of the above

154. Streams also receive data from the program and direct it to the_____.

- A. Different programs
- B. Physical devices
- C. Both (a) and (b)**

D. Files

155. What is a collection of related data stored on some storage device called?

- A. Arrays
- B. Streams

C. Files

D. Pointers

156. A file stream refers to the flow of data between_____.

A. Programs

B. Files

C. Newline character

D. Both (a) and (b)

157. If a number, say12345, is stored in text format, it occupies how many bytes of memory?

A. Five

B. Two

C. Three

D. One

158. Since data is stored in the same format as in the internal memory, saving and accessing the data from binary files is _____ than the text files.

A. Staggered

B. Slower

C. Faster

D. None of the above

159. Which input file stream class provides functions for performing reading operations only?

A. ifstream

B. istream class

C. read()

D. None of the above

160. What is used to manage the buffered I/O of file stream?

A. ifstream

B. filebuf

C. ofstream

D. None of the above

161. The fstream contains all the functions of _____ classes which are inherited through istream class.

A. istream

B. ostream

C. Both (a) and (b)

D. None of the above

162. To perform any operation on a file, it needs to be_____ first.

A. Cleaned

B. Opened

C. Closed

D. Organized

163. In C++, each file is _____ of a particular stream class.

A. An argument

B. A function

C. An object

D. None of the above

164. The functions _____ also known as binary I/O functions are used to handle blocks of binary data.

A. `read()`

B. `write()`

C. Both (a) and (b)

D. `get()` and `put()`

165. The process of reading and writing sequence of bytes is known_____.

A. Object serialization

B. Binary serialization

C. Both (a) and (b)

D. Streams

166. Which signal can be detected by using the function `eof()` which is a member function of the `ios` class?

A. End-of-file (EOF)

B. `streamsize gcount();`

C. `char title[30];`

D. None of the above

167. In C++, every file is associated with how many file pointers?

A. Three

B. Two

C. Four

D. One

168. A file stream refers to the flow of data between a_____.

A. Program and object

B. Program and stream

C. Program and file

D. None of the above

169. Depending on the flow of data from file or to file, stream can be classified into_____.

A. Input stream and output stream

B. Mode and binary mode

C. `ofstream` and `fstream`

D. None of the above

UNIT 10

170. _____ main advantage of object-oriented programming.

A. Code usability

B. Code reusability

C. Templates

D. None of the above

171. a sum() function defined to add two integers can be called any number of times with different _____.

A. Integer values

B. Templates

C. Codes

D. None of the above

172. Templates are also known as _____?

A. Generics

B. Parameterized types

C. Both (a) and (b)

D. None of the above

173. Who writes the same code repeatedly for different data types (as in the case of overloaded functions)?

A. Coder

B. Mathematician

C. Programmer

D. None of the above

174. The C++ template mechanism allows a generic type to be passed as a parameter in the definition of a _____ so that they can work with different types of data?

A. Function

B. Class

C. Both (a) and (b)

D. Integer

175. What is the main advantage of using a template?

A. Reduces the size of the source code

B. Increases code flexibility

C. Writes the same code

D. Both (a) and (b)

176. When templates are used with functions they are known as_____.

A. Function templates

B. Class templates

C. Generic programming

D. Data structures

177. Which of the following statements is correct?

(i) A function template, also known as a generic function.

(ii) The definition of templates is dissimilar to the definition of ordinary functions.

A. (ii) only

B. (i) only

C. Both are correct

D. None are correct

178. While using function templates, only _____- function signature needs to be defined.

A. Two

B. One

C. Three

D. None of the above

179. When a template is defined, what does it provide in order to generate many functions?

A. Blueprint

B. Syntactical skeleton

C. Both (a) and (b)

D. Syntax

180. After defining the function template, the next step is to call it in another function such as_____.

A. int

B. sum() function

C. double data type

D. in main()

181. How many parameters does the function template sum()accept?

A. Two

B. Three

C. One

D. None of the above

182. While using class templates, how many class definition needs to be created?

A. One

B. Two

C. Three

D. None

183. A class template is used in those situations where _____ have the same class definition but handle different data types.

A. One or more classes

B. Two or more classes

C. One

D. None of the above

184. Inheritance provides a way to re-use the object code, whereas a template provides a way to re-use the _____.

A. Source code

B. Templates

C. Arguments

D. None of the above

185. _____ is an approach of writing programs in which a generic type is passed as a parameter in the definition of a function or a class so that they can work with different types of data.

A. Object-oriented programming

B. Function template

C. Specialization

D. Generic programming

UNIT 11

186. The exceptions that occur at specific program statements are called_____.

A. Synchronous exceptions

B. Exception handling

C. Asynchronous exceptions

D. None of the above

187. The point within the function at which the throw statement is executed is called the_____.

A. Throw point

B. Synchronous exceptions

C. Asynchronous exceptions

D. None of the above

188. How many types of exceptions are there?

A. Three

B. Two

C. One

D. None of the above

189. An exception is an unexpected event that occurs during the execution of a_____.

A. Statement

B. Code

C. Program

D. None of the above

190. C++ exception handling mechanism mainly uses how many keywords?

A. Four

B. Three

C. Two

D. None of the above

191. What allows multiple catch blocks to handle different types of exceptions?

A. C

B. C++

C. Exceptions

D. None of the above

192. A throw statement without any argument is used to rethrow an_____.

A. Try block

B. Catch block

C. Exception

D. None of the above

193. The calling function checks for the return values and then appropriately handles the_____.

A. Exceptions

B. Error

C. Both (a) and (b)

D. None of the above

194. _____ an exception allows multiple handlers to access the same exception.

A. Blocking

B. Throwing

C. Rethrowing

D. None of the above

195. Sometimes it is not possible to predict all types of exceptions that can occur during the program execution and hence, separate _____ - cannot be provided to handle all the exceptions.

A. Try block

B. Ellipsis (...)

C. Catch blocks

D. Executions

196. Whenever an exception is thrown, _____ are searched in sequential order for an appropriate match.

A. Try block

B. Executions

C. Catch blocks

D. Programs

197. When an exception is thrown, it needs to be_____.

A. Executed

B. Handled appropriately

C. Resolved

D. None of the above

198. Whenever an exception occurs it is thrown using the_____.

A. User-defined function

B. throw exception

C. throw statement

D. None of the above

199. The argument exception used with the throw statement can be either of built-in data type such as_____ or a user-defined data type such as class, struct, etc.

A. float

B. int

C. Both (a) and (b)

D. throw;

200. The point within the function at which the throw statement is executed is called the_____.

A. Try block

B. Throw point

C. Catch block

D. None of the above