Roll No.----------------------

प्रश्नपुस्तिका क्रमांक
Question Booklet No.

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प्रश्नपुस्तिका सीरीज
Question Booklet Series

D

M.Sc (Electronics) First Semester, Examination, February/March-2022
ELC-103(N)
C++ Programming and Data Structure

Time : 1:30 Hours   **Maximum Marks-100**

जब तक कहा न जाय, इस प्रश्नपुस्तिका को न खोलें

505

निर्देश :–   1.   परीक्षार्थी अपने अनुक्रमांक, विषय एवं प्रश्नपुस्तिका की सीरीज का विवरण यथास्थान सही– सही भरें, अन्यथा मूल्यांकन में किसी भी प्रकार की विसंगति की दशा में उसकी जिम्मेदारी स्वयं परीक्षार्थी की होगी।

2.   इस प्रश्नपुस्तिका में 100 प्रश्न हैं, जिनमे से केवल 75 प्रश्नों के उत्तर परीक्षार्थियों द्वारा दिये जाने है। 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 प्वांइट पेन से पूरा भर दें। यदि किसी परीक्षार्थी द्वारा निर्धारित प्रश्नों से अधिक प्रश्नों के उत्तर दिये जाते हैं तो उसके द्वारा हल किये गये प्रथमतः यथा निर्दिष्ट प्रश्नोत्तरों का ही मूल्यांकन किया 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 प्रश्नपुस्तिका बुकलेट एवं ओ०एम०आर० शीट पृथक–पृथक उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें।

7.   निगेटिव मार्किंग नहीं है।

महत्वपूर्ण :–   प्रश्नपुस्तिका खोलने पर प्रथमतः जॉच कर देख लें कि प्रश्नपुस्तिका के सभी पृष्ठ भलीभॉति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्ष निरीक्षक को दिखाकर उसी सीरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।

1. The body of function contains_____.

   (A) Return statement declaration part

   (B) A variable

   (C) Processing part

   (D) All the above

2. What type of integer starts with OX?

   (A) Decimal

   (B) Binary

   (C) Hexadecimal

   (D) Octal

3. The special characters like tab, backspace, line feed, null, back slash are called _____ character constant:

   (A) Floating

   (B) String

   (C) Graphic

   (D) Non-graphic

4. _____ variable of the same data type can be declared in a single declaration statement.

   (A) Two

   (B) Three

   (C) Only one

   (D) More than one

5. In C++ programming language, to write data that contains variables of type flat to an object of type of stream, which of the following should be used?

   (A) Put ( )

   (B) Seekg ( )

   (C) Write ( )

   (D) Insertion operator

6. Keyword typed is used to declare:

   (A) A synonym for an existing type

   (B) Absence of a type

   (C) Objects that can be modifiedoutside of a program control

   (D) A member function that is defined in a subclass

7. When a language has the capability to produce new data types, it is called:

   (A) Extensible

   (B) Encapsulated

   (C) Reprehensible

   (D) None of these

8. In a class specified, data or functions and designated private are accessible:

   (A) Only to public members of class

   (B) Only if you know the password

   (C) To any function in the program

   (D) To member functions of that class

9. Which of the following are good reasons to use an object oriented language?

   (A) An object oriented program can be taught to correct its own errors

   (B) Program statements are simpler than in procedural language

   (C) We can define our own data types

   (D) None of these

10. The enum, unsigned int, short int and int data type's uses _____ bits.

    (A) 8

    (B) 16

    (C) 32

    (D) 64

11. _____ type is further divided into int and char.

    (A) Float

    (B) Int

    (C) Char

    (D) Integral

12. _____ data type to indicate the function does not return a value.

    (A) Static

    (B) Main

    (C) Public

    (D) Void

13. The operands and the operators are grouped in a specific logical way of evaluation is called _____.

    (A) Assignment

    (B) Association

    (C) Arithmetic

    (D) Class

14. _____ are the kind of data that variables hold in a programming language.

    (A) Conditional type

    (B) Constant type

    (C) Variable type

    (D) Data types

15. The address number starts at _____.

    (A) 1

    (B) 2

    (C) 3

    (D) Null

16. _____ storage class global variable known to all functions in the current program.

   (A) Register

   (B) Extern

   (C) Static

   (D) Auto

17. _____ class is another qualifier that can be added to a variable declaration.

   (A) Register

   (B) Static

   (C) Sub

   (D) Storage

18. What are shift operator?

   (A) <<

   (B) >>

   (C) >

   (D) Both (A) and (B)

19. _____ is an operator which returns the memory size requirements in terms of bytes.

   (A) Double

   (B) Size

   (C) Size of

   (D) Long

20. How many fundamental data types are there in C++?

   (A) 1

   (B) 2

   (C) 3

   (D) 4

21. _____ is a sequence of character surrounded by double quotes.

   (A) Constant

   (B) Numeric

   (C) Character

   (D) String literal

22. _____ is the C increment Operator in C++.

   (A) ++

   (B) +*

   (C) *+

   (D) - -

23. How many operators are classified in C++?

   (A) 11

   (B) 13

   (C) 14

   (D) 15

24. _____ constant is a signed real number.

   (A) Char

   (B) String

   (C) Integer

   (D) Floating point

25. What is the other name for variable?

   (A) While

   (B) Visual

   (C) Identifier

   (D) Constant

26. The constant that should not have fractional part is _____ .

    (A) Float

    (B) Double

    (C) Integer

    (D) Exponent

27. What are bitwise operators?

    (A) &

    (B) !

    (C) ^

    (D) All (A, B, and C)

28. Which operator requires three operands?

    (A) Unary

    (B) Binary

    (C) Ternary

    (D) Bitwise

29. What is the length of double data type?

    (A) 8

    (B) 16

    (C) 32

    (D) 64

30. Built in Data type is also called as _____ data type.

    (A) Fundamental

    (B) Secondary

    (C) Void

    (D) Integer

31. _____ Type is used to declare a generic pointer in C++.

   (A) Int

   (B) Void

   (C) Static

   (D) Float

32. _____ storage class variables are defined in another program.

   (A) Register

   (B) Auto

   (C) Extern

   (D) Static

33. Auto variables get undefined values known as _____.

   (A) Garbage

   (B) Auto

   (C) Register

   (D) Static

34. _____ Operator requires two operands.

   (A) Logical

   (B) Binary

   (C) Unary

   (D) Ternary

35. Addressing is done using _____ number system.

   (A) Decimal

   (B) Hexadecimal

   (C) Octal

   (D) Binary

36. Integer values are stored in _____ bit format in binary form.

    (A) 8

    (B) 16

    (C) 32

    (D) 64

37. Variable names must begin with_____.

    (A) #

    (B) $

    (C) Number

    (D) Letter

38. Float and double are related to _____ fata type.

    (A) Void

    (B) Floating

    (C) Fixed

    (D) Integral

39. How many C++ data types are broadly classified?

    (A) 2

    (B) 3

    (C) 4

    (D) 5

40. _____ operators have lower precedence to relational and arithmetic operators.

    (A) Conditional

    (B) Boolean

    (C) Logical

    (D) Relational

41. Logical AND (&&) and Logical OR (||) are _____ operators.

   (A) Logical

   (B) Equality

   (C) Class member

   (D) Comma

42. Signed, unsigned, long and short are some of the _____.

   (A) Void

   (B) Data

   (C) Derived data

   (D) Modifiers

43. How many storage specifies are there in a C++?

   (A) 2

   (B) 3

   (C) 4

   (D) 5

44. Auto, static, extern and register are called as_____.

   (A) Static

   (B) Register

   (C) Auto

   (D) Storage specifier

45. Every variable should be separated by_____ separator.

   (A) Dot

   (B) Colon

   (C) Comma

   (D) Semicolon

46. The modulus operator uses _____ character.

    (A) +

    (B) *

    (C) /

    (D) %

47. What is a constant that contains a single character enclosed within single quotes?

    (A) Character

    (B) Numeric

    (C) Fixed

    (D) Floating point

48. _____ is the smallest individual unit in a program.

    (A) Variable

    (B) Control

    (C) Character

    (D) Token

49. Which one of the following is a keyword?

    (A) Size

    (B) Key

    (C) Jump

    (D) Switch

50. C++ was developed by_____.

    (A) Thomas Kushz

    (B) John Kemney

    (C) Bjarne Stroutstrup

    (D) James Goling

51. Copy constructor is invoked when a/an:

    (A) Argument is passed by value

    (B) Argument is passed by reference

    (C) Function returns for reference

    (D) Function returns by value

52. Classes are useful because they:

    (A) Can closely model objects in the real world

    (B) Bring together all aspects of an entity in one place

    (C) Permit data to be hidden from other classes

    (D) Are removed from memory when not in use

53. In new operator:

    (A) Each link contains data or a pointer to data

    (B) Each link contains a pointer to the next link

    (C) Links are stored in an array

    (D) An array of pointers point to the links

54. Virtual functions allow to:

    (A) Use same function call to execute member function of objects from different classes

    (B) Group objects of different classes so they can all be assessed by the same function code

    (C) Create functions that have no body

    (D) Create an array of type pointer to base calls that can hold pointers to derived classes

55. The keyword void is used to declare:

    (A) Objects that can be modified outside of program control

    (B) A synonym for an existing type

    (C) A member function that is defined in a subclass

    (D) Absence of a type

56. A virtual base class is useful when:

(A) It makes sense to use a base class is ambiguous

(B) Identification of a function in a base class is ambiguous

(C) There are multiple paths form one derived class to another

(D) Different functions in base and derived classes have the same name

57. Which of the following user-defined header file extension used in c++?

(A) hg

(B) cpp

(C) h

(D) hf

58. Turbo C++ library function can be used:

(A) Draw lines and circules

(B) Write text in variety of fonts and sizes

(C) Colour any closed figure

(D) All of these

59. Braking a program into several files is desirable because:

(A) A program can be divided functionally

(B) Each programmer can work on a separate file.

(C) Some files donâ€™t need to be recompiled each time

(D) Files can be marketed in object form

60. In stock, the data item placed on the stack first is:

(A) Given as index zero

(B) Not given as index number

(C) The first data item to be removed

(D) The last data item to be removed

61. The member function can always access the data in:

    (A) Any object of the class of which it is a member

    (B) The public part of its class

    (C) The class of which it is member

    (D) The object of which is a member

62. The public files in a class library usually contain:

    (A) Variable definition

    (B) Class declarations

    (C) Constant definitions

    (D) Member function definitions

63. In a linked list:

    (A) Each link contains data or a pointer to data

    (B) Links are stored in an array

    (C) A array of pointers point to the link

    (D) Each link contains a pointer to the next link

64. In C++, which of the following can legitimately be passed to a function?

    (A) A constant

    (B) A variable

    (C) A structure

    (D) All of these

65. In C++, a structure brings together a group of:

    (A) Items of the same data type

    (B) Integers with user-defined names

    (C) Related data items, variables

    (D) All of these

66. Elements double array [7] is which element of the array?

    (A) Sixth

    (B) Seventh

    (C) Eighth

    (D) Impossible

67. The break statement causes an exit:

    (A) From the innermost loop or switch

    (B) Only form the innermost switch

    (C) Only from the innermost loop

    (D) From all loops and switches

68. A function argument is a:

    (A) Value sent to function by the calling program

    (B) Value returned by the function to the calling program

    (C) Variable in the function that receives a value form the calling program

    (D) Way that functions resist accepting the calling program values

69. In C++, a function contained within a class is called:

    (A) A method

    (B) A class function

    (C) Member function

    (D) None of these

70. The function bad( ) is declared in the header file:

    (A) <iostream.h>

    (B) <stdio.h>

    (C) <math.h>

    (D) <stdlib.h>

71. A static function:

    (A) Should be called when an object is destroyed

    (B) Can be called using the class name and function

    (C) Is closely connected with an individual object of a class

    (D) Is used when a dummy object must be created

72. The dot operator connects which of the following two entities?

    (A) Class object and member of that class

    (B) Class and member of that class

    (C) Class object and a class

    (D) Class member and class object

73. The library function exit () causes an exit form:

    (A) The program in which it occurs

    (B) The function in which it occurs

    (C) The block in which it occurs

    (D) The loop in which it occurs

74. A variable defined within a block is visible:

    (A) From the point of definition on ward in the block

    (B) From the point of definition on ward in the function

    (C) From the point of definition on ward in the program

    (D) Throughout the function

75. An enumerated data type brings together a group of:

    (A) Constant values, integers with user defined names

    (B) Related data type

    (C) Items of different data type

    (D) All of these

76. The scope resolution operator usually:

(A) Providing a useful conceptual frame work

(B) Specifies a particular class

(C) Tells what base class is derived form

(D) Limits the visibility of variables to a certain function

77. memorizing the new items used in C++ is:

(A) Critically important

(B) Completely irrelevant

(C) The key to wealth and success

(D) Something you can return to later

78. Redirection redirects:

(A) Screen from a device to a stream

(B) A device from the screen to a file

(C) A stream from a file to the screen

(D) A file from a device to a stream

79. _____ allocates memory, based on the data type of the variable.

(A) Interpreter

(B) Link

(C) Converter

(D) Compiler

80. Which operator is used to compare numerical values?

(A) Relational

(B) Conditional

(C) Assignment

(D) Arithmetic

81. _____ data types are structure, union, class and enumeration.

(A) Derived

(B) Integer

(C) Built-in

(D) User defined

82. _____ refers to the process of changing the data type of the value stored in a variable.

(A) Type char

(B) Type int

(C) Type float

(D) Type cast

83. Which punctuator is used to group a set of C++ statements?

(A) {}

(B) []

(C) ()

(D) /

84. The names beginning with an underscore are reserved for _____ variable.

(A) Globar

(B) Local

(C) Internal system

(D) External system

85. What is the length of long double data type?

(A) 8

(B) 16

(C) 32

(D) 80

86. Allows users to define the user defined data type identifier.

   (A) Class

   (B) Data

   (C) Identifier

   (D) Type definition

87. Which storage class defines local variable known to the block in which they are defined?

   (A) Register

   (B) Auto

   (C) Extern

   (D) Static

88. Every variable will be referred by its _____.

   (A) Data

   (B) Int

   (C) Name

   (D) Address

89. _____ are data items whose value cannot be changed.

   (A) Class

   (B) Return

   (C) Constants

   (D) Variable

90. The basic types are collectively called as_____.

   (A) Looping

   (B) Tokens

   (C) Expression

   (D) Variables

91. Which one holds the values or constants in memory boxes?

(A) Variable

(B) While

(C) Go to

(D) Switch

92. _____ literals are treated as array of characters.

(A) Graphic

(B) Character

(C) String

(D) Non-graphic

93. What is a file?

(A) A file is a selection of main storage used to store data.

(B) A file is another name for floppy disk.

(C) A file is a part of a program that is used to describe what the program should do.

(D) A file is a collection of information that has been given a name and its stored in secondary memory.

94. The statement int A; b; is invalid because _____.

(A) Variable should be separated by Comma

(B) Capital A is not allowed

(C) Only one variable should be given

(D) All of these

95. When a=6 and c=a++ what is the value of c?

(A) 6

(B) 7

(C) 8

(D) 9

96.   When a=6, c=++a what will be the value of c?

   (A) 6

   (B) 7

   (C) 8

   (D) 9

97.   For example class boy, _____ is user defined data type of class.

   (A) Class

   (B) Type

   (C) Boy

   (D) User

98.   _____ variables are sensitive to the data type they point to.

   (A) Char

   (B) Pointer

   (C) Integer

   (D) Float

99.   Which one is the valid real constant?
   (A) 85.46
   (B) 85
   (C) 0.85
   (D) Both (A) and (C)

100.   Where a condition is checked to see whether to do one or more iteration is:
   (A) Definite iteration
   (B) Sequencing
   (C) Indefinite iteration
   (D) None of these

******

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