Question Paper Sl. No. 0462

4406

Register Number | | | | | | |

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Part III — COMPUTER SCIENCE

(Vocational Component under General Stream)

(English Version)

Time Allowed : 3 Hours] [Maximum Marks : 150

Note : i) Candidates should answer *all* the questions in **PART – I** (Objective type) (1 to 75) in the separate OMR Answer Sheet supplied. (Refer instructions given in the OMR Answer Sheet)

ii) The number of the sign '—' (dash) as found in the right-hand top corner of the Question Paper (*i.e.*, | — | (1) or | — — | (2) or | — — — | (3) or | — — — — | (4) should be shaded in the OMR Answer Sheet using HB Pencil.

iii) Time allotted for answering question numbers 1 to 75 is first 75 minutes.

iv) **Parts – II** and **III** questions (76 to 110) should be answered in the main answer-book.

PART – I

Choose the best answer : 75 × 1 = 75

1. Which of the following formulae calculates the sum of numbers in the cell A2 of sheet 1 and A1 of sheet 2 ?

A) = sum (sheet 1 . A2 + sheet 2 . A1)

B) = sum (sheet 1 : A2 ; sheet 2 : A1)

C) = sum (sheet 1 . A2 ; sheet 2 . A1)

D) = sum (sheet 1 . A2 : sheet 2 . A1).

2. The term data comes from the word

A) Datum B) Dat

C) Datu D) Datumus.

3. Each column in a table represents a

A) Record B) Field

C) File D) Database.

4. Spreadsheet is an example of which of the following databases ?

A) Flat File B) Network

C) Relational D) Hierarchical.

5. Which of the following are called the common fields in a relational database ?

A) Keys B) Files

C) Records D) Table.

6. In which of the following mechanisms are the data and functions bound together within an object definition ?

A) Polymorphism B) Inheritance

C) Encapsulation D) Operations.

7. The ability of an object to respond differently to different messages is called as

A) Polymorphism B) Inheritance

C) Encapsulation D) Function.

8. Who developed C ++ ?

A) Bjarne Stroustrup B) Dennis Ritchie

C) Rick Mascitti D) Dan Bricklin.

9. By default, the local variables are

A) Auto B) Static

C) Extern D) Register.

10. What is the range of int data type ?

A) – 32768 to 32767 B) – 32767 to 32768

C) – 32728 to 32727 D) – 32728 to 32729.

11. Which of the following class access specifiers is optional ?

A) Public B) Protected

C) Private D) Class.

12. Data members are called as

A) Methods B) Attributes

C) Datatypes D) Pointers.

13. Which of the following members can be accessed only from within the class ?

A) Private B) Public

C) Protected D) Static.

14. Class product

```
{
    int a, b ;
    float P ;
  public :
      void assign_data( ) ;
      void display( ) ;
} ;
void main( )
{
    product P1, P2 ;
}
```

The number of bytes allotted for the variable P1 is

A) 12 B) 10

C) 8 D) 4.

15. Which of the following terms means a name having two or more distinct meanings ?

A) Overloading B) Encapsulation

C) Inheritance D) Data Abstraction.

16. In StarOfficeWriter, the flashing vertical bar is called

A) Pointer B) Marker

C) Insertion point D) Key.

17. Which of the following keys is used to select the entire document in StarOfficeWiter ?

A) Ctrl + E B) Ctrl + L

C) Ctrl + A D) Ctrl + D.

18. Which is used to call attention to key ideas or points in a document ?

A) Highlighting B) Editing

C) Formatting D) Text color.

19. Which of the following is the decorative font ?

A) Fajita B) Times New Roman

C) Arial D) Arial Black.

20. Which key is pressed to select the spelling command ?

A) F5 B) F6

C) F7 D) F2.

21. In which format is the date format entered in a cell in StarOfficeCalc ?

A) DD / MM / YY B) MM / DD / YY

C) YY / DD / MM D) YY / MM / DD.

22. Which reference operator is named as Intersection ?

A) : B) !

C) & D) =

23. Which of the following has shortcut icons for frequently done tasks in spreadsheet ?

A) Menu bar B) Formula bar

C) Function bar & Object bar D) Main tool bar.

24. Which command is used to generate a series of data on selected cells ?

A) Format B) Fill

C) Insert D) Series.

25. Which icon is used to insert object from other application into a worksheet ?

A) Insert OLE Object B) Insert Floating Frame

C) Insert plug-in D) Insert Applet.

26. How many field types are there in StarOfficeBase ?

A) 13 B) 11

C) 10 D) 20.

27. Which of the following filters is a filter used with a condition ?

A) Autofilter B) Sortfilter

C) Filter D) Standard filter.

28. DBMS stands for

A) DataBase Manage System

B) DataBase Management System

C) DataBase Management Structure

D) DataBase Message System.

29. To insert a text outline into presentation, choose

A) File → Insert → Presentation

B) File → Send → Presentation

C) File → Insert → Outline to Presentation

D) File → Send → Outline to Presentation.

30. Which of the following is a process of joining data from two or more tables of different databases ?

A) Searching B) Sorting

C) Merging D) Filtering.

31. The size of the array is always

A) Positive B) Negative

C) Float D) Double.

32. How many elements are stored in an array int num [4] [2] ?

A) 2 B) 4

C) 6 D) 8.

33. Which of the following functions compares the two given strings ?

A) strcpy( ) B) cpystr( )

C) cmpstr( ) D) strcmp( )

34. How many copy of the member variable is created if it is static memory ?

A) 2 B) 1

C) 3 D) 4.

35. A class comprises

A) data members B) member functions

C) both (A) and (B) D) none of these.

36. To change the background of a slide, choose

A) File → Page → Background B) Format → Slide → Background

C) File → Slide → Background D) Format → Page → Background.

37. Which of the following keys is used to start a presentation ?

A) F2 B) F5

C) F7 D) F11.

38. Which view allows you to create and edit slides ?

A) Handouts view B) Outline view

C) Notes view D) Normal view.

39. Which key is used to print a document in StarOfficeImpress ?

A) Alt + P B) Ctrl + P

C) Shift + P D) Shift + Ctrl + P.

40. Which command is used to open Navigator ?

A) File → Navigator B) Tools → Navigator

C) Edit → Navigator D) Insert → Navigator.

41. Which of the following is not true related to function overloading ?

A) Each overloaded function must differ by the number of its formal parameter.

B) The return type of overloaded functions may be the same data type.

C) The default arguments are considered by the C++ compiler as part of the parameter list.

D) Do not use the same function name for two unrelated functions.

42. By integral promotions, int data type can be converted into which of the following ?

A) Char B) Double

C) Float D) All of these.

43. Which of the following cannot be overloaded ?

A) Constructors B) Destructors

C) Operators D) Functions.

44. Which of the following is automatically executed when the object is created ?

A) Constructor B) Variables

C) Operators D) Destructor.

45. When a class object goes out of scope, which of the following special functions gets executed ?

A) Destructor B) Constructor

C) Overloading D) Pointer.

46. Which of the following variables holds a memory address ?

A) Static B) Pointers

C) Register D) Auto.

47. A preprocessor directive starts with

A) $ B) #

C) < D) @.

48. Which of the following statements forces the next iteration of the loop to take place skipping any code following the statement in the body loop ?

A) Break B) Continue

C) Switch D) For.

49. How many times will the following loop be executed ?

```
for ( i = 1 ; i < 30 ; i ++ )
```

A) 1 B) 29

C) 30 D) 31.

50. Which of the following is an entry-controlled loop ?

A) For B) Do-while

C) Switch D) If else.

51. To move Insertion Point Backward through the cells of a table, press

A) shift B) shift + tab

C) TAB D) Left arrow.

52. By default, each cell in a table includes a

A) border B) row

C) column D) row and border.

53. The length of a document will be more than the width. This alignment is called as

A) Landscape B) Portrait

C) Paper format D) Paper source.

54. In StarOfficeWriter, to display the ruler on the sceen, select ruler under

A) File B) Edit

C) Format D) View.

55. Visicalc was invented by

A) Dan Bricklin

B) Bob Frankston

C) Bill Gates

D) Dan Bricklin and Bob Frankston.

56. MPEG stands for

A) Moving Pictures Experts Group

B) Model Pictures Expression Group

C) Moving Pictures Expression Group

D) Morphing Pictures Experts Group.

57. Conversion of analog sound waves to a digital format is called as

A) echo B) sound forge

C) frequency D) sampling.

58. Which of the following is a technique to blend two or more images to form a new image ?

A) Warping B) Morphing

C) Modelling D) Animating.

59. In which year was real audio format developed ?

A) 1982 B) 1995

C) 1994 D) 1981.

60. Which tag is used to add in-line sound to a web page ?

A) <Inline> B) <bgsound>

C) <sound> D) <helper>

61. The statement int A ; b ; is invalid because

A) only one variable should be given

B) capital A is not allowed

C) variables should be separated by comma

D) all of these.

62. Which of the following statements, marks the end of the function in C ++ ?

A) Continue B) Break

C) Return D) End.

63. In which of the following methods any change made in the format parameter is reflected back in the actual parameter ?

A) Call by value B) Call by reference

C) Call by function D) Call by statement.

64. The function that returns no value is declared as

A) Main B) Friend

C) Void D) Online.

65. Which of the following is called scope resolution operator ?

A) & B) *

C) :: D) ? :

66. CBT means

A) Computer Based Tutorials B) Common Based Tutorials

C) Computer Based Teaching D) Computer Based Teacher.

67. Which of the following IT Enabled Services is a category of pertaining to collection, digitization and processing of data ?

A) Call Centres B) Data Management

C) E-Governance D) Web based services.

68. Which of the following refers to the process of converting a non-digital material to digital form ?

A) Data conversion B) Medical transcription

C) Data digitization D) Digital conversion cracking.

69. Which of the following securities refers to the protection of hardware ?

A) Personal B) Personnel

C) Physical D) Data.

70. If a software runs on an idle computer without the knowledge of the organization, it is called as theft of

A) software B) organization

C) computer time D) hardware.

71. Name of a destructor begins with

A) + B) ?

C) ~ D) !

72. Which of the following is a class from which other classes are derived ?

A) Derived class B) Base class

C) Function class D) Superclass.

73. Which of the following is a default visibility mode ?

A) Public B) Protected

C) Private D) Class.

74. Classes used only for deriving other classes are called as

A) base B) derived

C) abstrart D) static.

75. What will be the 85% usage of computer ?

A) Word processing B) Database

C) Spreadsheet D) Presentation.

PART – II

Answer any *twenty* questions in *one* or *two* sentences each : $20 \times 2 = 40$

76. Define Text editing.
77. How will you delete the entire table in StarOfficeWriter ?
78. Name the different types of cell referencing in StarOfficeCalc ?
79. Write a note on text operators in StarOfficeCalc.
80. What is a database ?
81. What distinguishes information from data ?
82. Define Warping.
83. Write about the types of Video compressions.
84. What is Custom Animation ?
85. What is Rehearse Timing ?
86. Define Object.
87. Find the value of C in the following C++ snippet :

```
X = 10 ;
F = 20 ;
C = X++ + ++F ;
```

88. Define Tokens.
89. What is type cast ?
90. Write the syntax of switch-case statement.
91. What are the advantages of using functions in C++ ?
92. Define array.
93. Find the errors in the following C++ snippets :

    a) `int a [ 5·5 ] ;` b) `float num [A] ;`

94. Define Data Abstraction.
95. What is meant by array of objects in C++ ?
96. How are functions involved in function overloading ?
97. When is a copy constructor executed ?
98. Write the syntax for deriving a class from its base class.
99. What is the use of call centres ?
100. Write a note on cracking.

PART – III

Answer any *seven* of the following questions in *five* to *ten* sentences each :

$7 \times 5 = 35$

101. Explain the different ways of selecting text in StarOfficeWriter document.
102. Explain the various functions of the icons in the table formatting toolbar.
103. What are functions ? How can you use them in your worksheet ? Explain with an example.
104. Explain the procedure to insert a chart in a worksheet.
105. How will you generate reports in StarOfffice Base ?
106. Explain Nested-if statement with an example.
107. Differentiate between call by value and call by reference of functions in C++.
108. What are the rules of operator overloading ?
109. Debug the following C++ program to get the given output :

```
#include < oistream.h >
class add
{     int num 1,num2,sum ;
      public
      add( )
      {     cout<<"\n Constructor without parameters.." ;
            num 1 = 0 ;
            num 2 = 0 ;
            sum = 0 ;
      }
      ad ( int sl, int s2 )
      {     cout<<"\n parameterized constructor..";
            num 1 = S1 ;
            num 2 = S2 ;
            sum = NULL ;
      }
      add ( add a )
      {     cout<<"\n Copy Constructor..." ;
            num1 = a . num1 ;
            num2 = a . num2 ;
            sum = NULL ;
```

```
}
Void getdata( )
{
        num1 = 10 ;
        num2 = 20 ;
}
void putdata( )
{       cout<<"\n The numbers are..." ;
        cout<<num1<'\t'< num2 ;
        sum=num1 + num ;
        cout<<"\n The sum of the numbers"<<sum ;
}
void main[ ]
{
        add a, b ( 10, 20 ), c(b) ;
        a.getdata( ) ;
        cout >>"\n Object a :" ;
        a. putdata( ) ;
        cout >>"\n Object b :" ;
        b. putdata( ) ;
        cout >>"\n Object c :" ;
        c. putdata( ) ;
}
```

```
Constructor without parameters..
parameterized constructor..
Copy constructor...
Object a :
The numbers are... 10 20
The sum of the numbers 30
Object b :
The numbers are... 10 20
The sum of the numbers 30
Object c :
The numbers are... 10 20
The sum of the numbers 30
```

110. Find the output of the following C++ program :

```
#include<iostream.h>
#include<conio.h>
class base
{
public:
base( )
{
cout<< "\n Constructor of base class ...";
}
~ base( )
{
cout<<"\n Destructor of base class ...";
} } ;
class derived : public base
{
public:
derived( )
{
cout<<"\n Constructor of derived..";
}
~ derived( )
{
cout<<"\n Destructor of derived..";
} } ;
class derived2 : public base
{
public :
derived2( )
{
cout<<"\n Constructor of derived2 ..";
}
~ derived2( )
{
cout<<"\n Destructor of derived2 ..";
}
} ;
void main( )
{
derived 2 x ;
}
```