Question Paper Sl. No.　　110639

7108 (N)

Register Number

Part III — Vocational Subjects

COMPUTER SCIENCE

(New Syllabus)

(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 sign '——'(dash) as found in the Right-hand top corner of
the Question Paper (i.e. ▬ (i) 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 :　　　　　　　　　　　　　$75 \times 1 = 75$

1.　The statement that creates multiple branches, depending on the value of a
single variable is

A)　do-while　　　　　　　　B)　switch

C)　if　　　　　　　　　　　D)　while.

2.　The default return data type of a function, if no data type is explicitly mentioned
is

A)　int　　　　　　　　　　B)　char

C)　float　　　　　　　　　D)　double.

[Turn over

3. The function strcpy (S1, S2)

     A)   copies S1 to S2 .

     B)   copies S2 to S1

     C)   appends S1 to end of S2

     D)   appends S2 to end of S1.

4. Which of the following is NOT true, related to functions ?

     A)   The actual parameters can be passed in the form of constants to the formal parameters of value type

     B)   The actual parameters can be passed only as variables to formal parameters of reference type

     C)   The default value in the formal parameters can be given in the form of variable initialization

     D)   The default value for an argument can be given in between the argument list.

5. In the following code, the scope of the variable a is

```
if ( x < y )
{
    int a ;
    a ++ ;
}
```

     A)   Local scope   B)   Function scope

     C)   File scope   D)   Class scope.

6. Which of the following is not a valid class access specifier ?

     A)   Private   B)   Public

     C)   Protected   D)   Pointer.

7. The members of a class are accessed using the operator

     A)   +   B)   . (dot)

     C)   <   D)   >

8. The variable that is initialized only when the first object of the class is created is

   A) static

   B) private

   C) public

   D) protected.

9. The class access specifier used to access friend function is

   A) private

   B) public

   C) protected

   D) both (B) and (C).

10. SQL stands for

    A) Structured Query Language

    B) Sorted Query Language

    C) Sorted Question Language

    D) Structured Question Language.

11. Filter used with a condition is called

    A) Auto Filter

    B) Default Filter (Standard filter)

    C) Conditioned Filter

    D) Unconditioned Filter.

12. The field type that is not allowed by StarOfficeBase is

    A) Text

    B) Binary

    C) Project

    D) Image.

13. The Computers that primarily use the hierarchical database are

    A) Super

    B) Mainframe

    C) Personal

    D) Mini.

14. To send text outline into presentation, select

    A) File → Send → Outline to presentation

    B) File → Outline to presentation

    C) File → Presentation

    D) File → Send→ Presentation.

15. If the length of the document is more than the width, the orientation is called as

    A) Layout

    B) Landscape

    C) Portrait

    D) Margin.

16. Which of the following keys is pressed to move backward through the cells of a StarOfficeWriter table ?

    A) Ctrl + Tab

    B) Shift + Tab

    C) Enter + Tab

    D) ESC + Tab.

[Turn over

17. In StarOfficeWriter, the page preview option is available under the menu.

A) Format

B) Edit

C) File

D) View.

18. To add a row after the last row of the table in StarOfficeWriter, the key pressed is

A) Tab

B) Shift

C) Alt

D) Ctrl.

19. The active cell in a spreadsheet is identified by

A) Insertion pointer

B) Cell pointer

C) Mouse pointer

D) Keyboard pointer.

20. CBT stands for

A) Computer Based Tutorials

B) Computer Based Tools

C) Computer Based Techniques

D) Coded Binary Tools.

21. A facility that allows the user to speak into a special device while typing a letter using computer is called

A) Cellphone

B) Telephone

C) Dictaphone

D) Speaker.

22. BPO may be expanded as

A) Business Publication Online

B) Business Process Outsourcing

C) Business Publication Outsourcing

D) Business Process Online.

23. A self replication program that can cause damage to data and files stored on the computer is

A) virus

B) antivirus

C) language

D) none of these.

24. The illegal access to the computer hardware and software is

A) Hacking

B) Cracking

C) Chatting

D) Browsing.

25. A template for entities that have common behaviour is

 A) class B) object

 C) methods D) attributes.

26. Which of the following is an Object Oriented Programming language ?

 A) C++ B) C

 C) BASIC D) FORTRAN.

27. Which of the following is not a C++ keyword ?

 A) this B) new

 C) cont D) if

28.
```
int a, b, c ;

a = 6 ;

b = 7 ;

c = ( a + + ) - ( - - b ) ;

cout << c ;
```

 The output of the above code, when it is executed is

 A) 0 B) 9

 C) 11 D) error.

29. The constant that should not have fractional part is

 A) Float B) Double

 C) Integer D) Exponent.

30. When an object is passed by reference to constructor, the constructor that is executed is

 A) copy B) static

 C) default D) inline.

31. The process of creating new classes from the existing class is

 A) Polymorphism B) Encapsulation

 C) Inheritance D) Abstract.

[Turn over

32. In inheritance, the newly created classes are

     A)   Base class   B)   Derived class

     C)   Super class   D)   Function.

33. Classes used only for deriving other classes are

     A)   Abstract classes   B)   Concrete classes

     C)   Static classes   D)   none of these.

34. 85% of computer usage is

     A)   Presentation   B)   Spreadsheet

     C)   Database   D)   Word processing

Read the following C++ program carefully and answer questions from 35 to 37.

```cpp
# include < iostream.h >
class negative
{
    int i ;
    public :
    void accept ()
    {
        cin >> i ;
    }
    void display ()
    {
        cout << i ;
    }
    void operator - ()
    {
        i = - i ;
    }
};
void main ()
{
    negative n 2 ;
    n 2. accept () ;
    - n 2 ;
    n 2.display () ;
}
```

35. Identify the operator that is overloaded :

    A)   =   B)   – (Unary)

    C)   – (Binary)   D)   negative.

36. The prototype of the overloaded member function is

    A)   negative operator – ( )   B)   void operator minus

    C)   void operator – ( )   D)   void operator – (negative)

37. Which of the following statements invokes the overloaded member function ?

    A)   Negative n 1 ( )   B)   – – n 2 ( )

    C)   n 2 + ;   D)   – n 2 ;

38. The function that initializes the object is

    A)   void   B)   destructor

    C)   inline   D)   constructor.

39. Whenever a class object goes out of scope a special function that gets executed is

    A)   Destructor   B)   Constructor

    C)   Destroy   D)   End.

40. The constructor defined by the computers in the absence of user defined constructor is

    A)   Copy   B)   Abstract

    C)   Default   D)   Destructor.

41. The shockwave format is used to store multimedia components created using

    A)   Media player   B)   Netscape Navigator

    C)   Internet Explorer   D)   Flash.

42. The application that allows to send and receive messages over cellphone is

    A)   Microwave Media Service

    B)   Multimedia Media Service

    C)   Multimedia Messaging Service

    D)   Microwave Messaging Service.

43. JPEG may be expanded as

   A) Joint Photographic Experts Group

   B) Joint Physical Exports Group

   C) Joint Physical Experts Group

   D) Joint Photographic Exports Group.

44. Which of the following is the commercial multimedia content development software ?

   A) Flash   B) Dream Weaver

   C) Maya   D) All of these.

45. AIFF format was developed by

   A) Real Networks   B) Apple

   C) IBM   D) Microsoft.

46. Which of the following is not a word processor ?

   A) StarWriter   B) Note pad

   C) MSWord   D) WordStar.

47. The key used to delete the character to the left of the insertion point is

   A) Backspace   B) Delete

   C) Space Bar   D) Enter.

48. Each time when increase indent icon is clicked, the Paragraph is indented by

   A) 1 inch   B) $\frac{1}{2}$ inch

   C) $\frac{1}{4}$ inch   D) 2 inches.

49. The shortcut key used to move to the beginning of a document is

   A) Shift + Home   B) Home + Enter

   C) Ctrl + B   D) Ctrl + Home.

50. The key pressed to select the spelling command is

   A) F7   B) F1

   C) F9   D) F5.

51. Which of the following icons is used to generate a scrolling screen within a Worksheet ?

    A) Insert Plug-in   B) Insert Floating frame

    C) Insert OLE object   D) Insert Chart.

52. The term data is derived from the word

    A) Datum   B) Datem

    C) Datas   D) Datus.

53. A column in a StarOfficeBase table represents a

    A) Structure   B) File

    C) Field   D) Record.

54. The key that uniquely identifies a record in a database is

    A) Primary key   B) Secondary key

    C) Record key   D) Unique key.

55. The process used to select the desired and specific data from a database is

    A) Merging   B) Sorting

    C) Editing   D) Searching.

56. The modifier that allows the variable to exist in the memory of the computer, even after losing its scope is

    A) Auto   B) Static

    C) Extern   D) Global.

57. The operator >> is called as

    A) Extraction operator   B) Insertion operator

    C) Abstraction operator   D) Stream operator.

58. A preprocessor directive starts with the symbol

    A) %   B) \

    C) $ D) #

59. Which of the following is an entry check loop ?

    A) Do-while   B) Switch

    C) While   D) If.

60. A program written in high level language is called as

   A) Object code
   B) Source code
   C) Executable code
   D) All of these.

61. An integer array with indexes from 0 to 4, all having value 1 may be declared and initialized as

   A) int x [4] = { 1 };
   B) int x [4] = { 1, 1, 1, 1 };
   C) int x [5] = { 1, 1, 1, 1, 1 };
   D) int x [ ] = { };

62. The size of the array must always be

   A) positive
   B) negative
   C) float
   D) double.

63. The collection of variables of the same type referenced by a common name is

   A) function
   B) array
   C) structure
   D) pointer.

64. Every class declaration is terminated by

   A) , (comma)
   B) . (dot)
   C) :: (double colon)
   D) ; (semicolon).

65. Which of the following statements is NOT true ?

   A) Member functions can be of static type
   B) The return type of a member function cannot be of object data type
   C) A non-member function cannot access the private data of a class
   D) Several different classes can use the same function name.

66. In presentation the view that allows us to view miniature images of all the slides is

   A) Slide sorter
   B) Master page
   C) Notes view
   D) Layout.

67. Which of the following is used to import objects from other application into a presentation ?

   A) Insert ODBC object
   B) Insert OLEDB object
   C) Insert OLE object
   D) Insert DBMS object.

68. The shortcut key for opening style list is

    A) F8　　　　　　　　　　　　　B) F7

    C) F5　　　　　　　　　　　　　D) F11.

69. To change the background colour of the current slide, click on

    A) Format → Page → Background

    B) Tools → Page → Background

    C) Edit → Page → Background

    D) View → Page → Background.

70. The key combination used to open print dialog box in StarOfficeImpress is

    A) Ctrl + Shift + P　　　　　　　B) Ctrl + P

    C) Shift + P　　　　　　　　　　D) Alt + P.

71. The intersection of rows and columns in a spreadsheet is called as

    A) Cell　　　　　　　　　　　　B) Row intersect

    C) Grid　　　　　　　　　　　　D) Column intersect.

72. A formula in spreadsheet always begins with

    A) +　　　　　　　　　　　　　B) –

    C) ^　　　　　　　　　　　　　D) =

73. Which of the following operators combines two texts ?

    A) +　　　　　　　　　　　　　B) &

    C) ||　　　　　　　　　　　　　D) =

74. The function used to find the square root of a number in StarOfficeCalc is

    A) SQR　　　　　　　　　　　　B) SQT

    C) SQRT　　　　　　　　　　　D) SRT.

75. The cells A4, A5, A6, B4, B5 & B6 are referred in a Worksheet as

    A) A4 : B6　　　　　　　　　　B) A1 : B6

    C) A1 : A6 ; B1 : B6　　　　　　D) A4 : A6 ; B4 : B6.

PART – II

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

76.   What are the steps in creating "Bulleted list" in a StarOfficeWriter document ?

77.   How will you create a header in a StarOfficeWriter document ?

78.   What is the difference between absolute cell referencing and relative cell referencing ?

79.   What do you mean by date arithmetic in StarOfficeCalc ?

80.   What are the steps involved in data processing ?

81.   Write a note on reports in StarOfficeBase.

82.   Write a note on inline sound and video.

83.   What are the uses of morphing ?

84.   What is the use of master page in presentation ?

85.   How will you create handouts in StarOfficeImpress ?

86.   Define Object.

87.   Explain conditional operator with example.

88.   Give any two uses of void data type.

89.   Write about the impact of modifiers in C ++.

90.   Find the errors in the following C++ program snippets :

```
Switch ( x )
{
        case 1 to 2 ;      Cout << "One" << "Two" ;
                           break
        case 3 to 4 :      Cout << Three << Four ;
                           break :
} ;
```

91.   Write a note on inline functions.

92.   What is meant by array of characters ?

93.   Explain the memory representation of 2-D arrays.

94.   Write the characteristics of member functions.

95. Write a note on array of objects.

96. How are the functions 'invoked in function overloading' ?

97. Write the rules for constructor definition and usage.

98. What are the different types of inheritance ?

99. What is meant by e-learning ?

100. List out the Common Computer Crimes.

PART – III

Answer any *seven* questions in *five* to *ten* sentences each : $7 \times 5 = 35$

101. Draw and explain the various icons available in table formatting toolbar in a StarOfficeWriter document.

102. Give the steps involved in replacing a given text in a StarOfficeWriter document.

103. How will you insert chart in a Worksheet ?

104. What is a function ? How will you use it in a Worksheet ? Give an example.

105. How can a database be queried in StarOfficeBase ?

106. Discuss about the general working of for loop in C++.

107. What are the different ways of passing parameters in C++ functions ?

108. What are the various rules while overloading operators in C++ ?

109. What is the output of the following C++ program ?

```cpp
#include<iostream.h>
#include<conio.h>
class simple
{
private :
    int a, b ;
public :
    simple ( int x, int y )
    {
        a = x ;
        b = y ;
```

[Turn over

```
            }

        ~ simple( )

        {

            cout<<"Destructor" ;

        }

    void putdata( )

        {

        cout<<"A="<<a<<"\n" ;

        cout<<"B="<<b ;

        }

    } ;

    void main( )

    {

        clrscr( ) ;

        simple s ( 5, 6 ) ;

        s.putdata( ) ;

        getch( ) ;

    }
```

110. Debug the errors in the following C++ program to get the given output :

Output :

```
    3

    4

    5
```

```
#include<iostream.h>

class A

{

    private

    int a ;

    public ;
```

```
              int a2 ;
              void getdata( )
              {
                  a1 = 3 ;
                  a2 = 5, a3 = 5 ;
              }
      protected
              int a3 ;
   }
   class B::public A( )
   {
       pubic :
           void func( )
           {
               int b1 ; b2 ; b3 ;
               getdata( ) ;
               b1 = a1 ;
               b2 = a2 ;
               a3 = b3 ;
               cout>>b1>>b2>>b3 ;
           }
   }
   void main[ ]
   {
       B der ;
       d.func( ) ;
```