

5107

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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 correct answer :

75 × 1 = 75

1. Which statement accomplishes jump from the current loop ?
 - A) Break
 - B) Continue
 - C) Exit
 - D) Quit.
2. Which induces the reusability of the code ?
 - A) Objects
 - B) Classes
 - C) Functions
 - D) Variables.

Data abstraction is achieved through

- A) encapsulation B) polymorphism
C) inheritance D) data hiding.

In C++, class variables are known as

- A) class B) functions
C) members D) objects.

1. Which operator cannot be overloaded ?

- A) + B) ++
C) > D) ::

1. A filter is also a type of

- A) table B) form
C) report D) query.

2. Which is a printed information that is assembled by gathering data based on user supplied criteria ?

- A) Table B) Form
C) Report D) Query.

13. To insert a calc cell range into a text document, choose

- A) Edit → paste B) Edit → copy
C) Edit → paste special D) Edit → copy special.

14. Which is used to assemble information from data ?

- A) DBMS B) Datum
C) Information D) Sorting.

15. Which key uniquely identifies a record in a table ?

- A) Primary B) Secondary
C) Tertiary D) Record pointer.

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Which laws prevent computer crimes in India ?

- A) Cyber
B) IT
C) Common
D) Cracking.

Computer ethics has its roots in the work of

- A) Charles Babbage
B) Blaise Pascal
C) Norbert Wiener
D) Bjarne Stroustrup.

Which one of the following is object oriented programming language ?

- A) C
B) C++
C) Pascal
D) Visual Basic.

7. A kind of self sufficient 'subprogram' with a specific functional area is called as

- A) Object
B) Class
C) Program
D) C++.

8. Which is not a C++ keyword ?

- A) auto
B) goto
C) constant
D) const.

9. Which marks the end of a string literal ?

- A) '\0'
B) '/o'
C) '\n'
D) '/n'.

30. Which is the conditional operator ?

- A) ?
B) ? :
C) : ?
D) ::

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How the derived class should be indicated ?

- A) Class der_name : visibility mode base class_id
- B) Class der_name :: visibility mode base class_id
- C) Class der_name ; visibility mode base class_id
- D) Class der_name, visibility mode, base class_id.

The default visibility mode is

- A) private
- B) protected
- C) public
- D) class.

6. Which unit enables data storage and management ?

- A) Archive
- B) Memoframe
- C) Projection TV
- D) Robot.

7. Operator functions must be

- A) member function
- B) friend function
- C) either (A) or (B)
- D) function.

8. Integral promotions are purely

- A) compiler oriented
- B) computer oriented
- C) data oriented
- D) program oriented.

9. Which function initializes the class object ?

- A) Constructor
- B) Destructor
- C) Main()
- D) User defined.

40. Which constructor is executed when an object is passed by reference to constructor ?

- A) Default
- B) Copy
- C) Parameterized
- D) Non-parameterized.

41. Which is an application that allows you to send and receive messages over cell phones ?

- A) SMS
- B) MMS
- C) SSM
- D) MSS.

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59. Which creates object files from source code ?
- A) Computer
B) C++
C) Compiler
D) Program.
60. What is the error thrown by the compiler for the following snippet ?
- ```
if (a > b) ;
 cout << "Greater" ;
else
 cout << "Lesser" ;
```
- A) Misplaced if  
B) Misplaced else  
C) Misplaced if ... else  
D) Misplaced else ... if.
61. An array in C++ is
- A) user defined data type  
B) built-in-data type  
C) derived data type  
D) default data type.
62. The array subscript always commences from
- A) 1  
B) - 1  
C) 0  
D) 100.
63. Strings are otherwise called as
- A) characters  
B) names  
C) literals  
D) constants.
64. Which binds the data and its associated functions together ?
- A) Object  
B) Class  
C) Program  
D) Method.
65. Which members can be accessed from outside the class also ?
- A) Private  
B) Protected  
C) Public  
D) Static.
66. To create a new presentation using a template, press
- A) Alt + Shift + N  
B) Shift + Ctrl + N  
C) Shift + N  
D) Alt + F + N.

To start a slide presentation, press

- A) F1  
B) F2  
C) F11  
D) F5 .

To change the slide background, choose

- A) File → Page → Background  
B) Format → Page → Background  
C) Edit → Page → Background  
D) View → Page → Background.

In StarOffice Impress, to open the style list the key to be pressed is

- A) F1  
B) F2  
C) F11  
D) F5 .

To print in StarOffice, the key combination to be pressed is

- A) Alt + P  
B) Alt + F + P  
C) Ctrl + P  
D) Ctrl + F + P.

1. Which bar is used to display the current cell and its contents ?

- A) Function  
B) Object  
C) Formula  
D) Scroll.

2. Default data format is

- A) dd/mm/yy  
B) mm/dd/yy  
C) yy/mm/dd  
D) dd/yy/mm.

73. Fill command is available under which menu ?

- A) File  
B) Format  
C) Edit  
D) Help.

74. Which are predefined formula that are available in StarOfficeCalc ?

- A) Functions  
B) Wizards  
C) Cell address  
D) Formats.

75. Which icon is used to insert objects from other application into a worksheet ?

- A) Insert Formula  
B) Insert Floating Frame  
C) Insert Applet  
D) Insert OLE Object.

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## PART - II

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

76. Define Text editing.
77. How to create a header ?
78. What is date arithmetic ? Explain.
79. Explain how to generate the series :

33, 30, 27, ... 3.

80. What is a database ?
81. Explain how to use Autofilter.
82. What is inline sound and video ?
83. Define Morphing.
84. What are Rehearse Timings ?
85. How to rename a slide ?
86. Define Encapsulation.
87. What is meant by type definition ?
88. What is the impact of modifiers ?
89. If  $x = 10$ ,  $f = 20$ ,  $c = x ++ + ++f$ ;

What is the value stored in the variable ?

$c$  is .....  $x$  is .....  $f$  is .....

90. Write down the syntax of the following :
  - i) if ..... else
  - ii) do ..... while.

91. What are the advantages of functions ?
92. What is the use of strcmp( ) ?
93. Write down the syntax of a 2D array declaration. Write an example.
94. How is memory allocated to an object of a class ?
95. List the specifications of a class.
96. How are functions invoked in function overloading ?
97. Write down any four rules for definition and usage of destructor.
98. What are the types of inheritance ?
99. Define virus.
100. What is a call centre ?

### PART - III

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

$$7 \times 5 = 35$$

101. How to create bullets and numbered lists ?
102. Explain the functions of any 10 icons of the Table formatting tool bar.
103. Explain how to create charts in worksheet.
104. List and describe the other features available with spreadsheet software in addition to its ability to calculate numbers.
105. Write any five advantages of computerized data processing.
106. Explain switch statement with a suitable example.
107. Explain call by value with an example.
108. Explain function overloading with an example.

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109. Write the output of the following c++ program :

```
#include<iostream.h>
#include<conio.h>
class add
{
int num1,num2,sum;
public:add()
{
clrscr();
cout<<"\n constructor without parameters";
num1=0;
num2=0;
sum=0;
}
add(int s1,int s2)
{
cout<<"\n parameterised constructor....";
num1=s1;
num2=s2;
sum=NULL;
}
void getdata()
{
cout<<"\n enter the data....";
cin>>num1>>num2;
}
void addition(add b)
{
sum=num1+num2 + b.num1+b.num2;
}
void putdata()
{
cout<<"\n the numbers are...";
cout<<num1<<"\t"<<num2;
cout<<"\n the sum of the numbers are"<<"\t"<<sum;
}
};
void main()
{
add a,b(10,20);
a.getdata();
a.addition(b);
cout<<"\n object a:";
a.putdata();
getch();
}
```

0. Debug the errors in the following c++ program :

```
include<iostream.h>
ass A

ivate:
 int a1;
ublic:
 int a2;
rotected:
 int a3;
;
class B:public A
{
public:
void func()
{
 int b1,b2,b3;
 b1=a1;
 b2=a2;
 b3=a3;
}
};
void Main()
{
 B der;
 der.a3 =0;
 der.func ();
}
}
```

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