12th

STD.

c) 1992

d) 1985

COMPUTER SCIENCE with Answers [Time Allowed : 3 hours] [Maximum Marks : 150] PART-I 8. In the early programming languages, the input Choose the most suitable answer from the and output data items were represented as: given four alternatives and write the option a) data b) object code and the corresponding answer. c) variables d) class $[75 \times 1 = 75]$ 9. In StarOffice Writer, which dialog box is opened when we select Format \rightarrow Page 1. Which is embedded in StarOffice Impress to command? support different audio and video file formats? a) Media player b) Outline a) Header b) Page Style c) Hatching d) Gradient c) Format d) Footer 2. In Presentation window, how many tabs are 10. Program statements that cause a jump of there in the center pane? control from one part of a program to another b) Six a) Four are called: c) Three d) Five b) Output a) Input 3. In Database Table, each column represents: c) Control Structures d) Assignment a) Row b) Field 11. CBT - stands for : c) Table d) Record 4. In StarOffice Base, which command is used a) Computer Based Tools to insert a text outline into a presentation? b) Computer Based Technique a) File \rightarrow Outline to presentation Computer Based Tutorials c) b) File \rightarrow Send \rightarrow Outline to Presentation d) Common Based Tutorials c) Format \rightarrow Outline to Presentation 12. Files in the OuickTime format have the d) Format \rightarrow Send \rightarrow Outline to Presentation extension: 5. If a = 5, b = 4 and c = 6, the value of the c) .swf a) .snd b) .mov d) wmf expression a = a + b / 2*c; is: 13. In StarOffice Calc, which one is the most a) 16 b) 17 commonly used function? c) 42 d) 60 SQR b) AVG a) 6. Which function inserts the function's code directly into the calling program? c) SUM d) POW 14. Which one of the following is not a multimedia a) void b) main content development software? c) return d) inline 7. In which year the Real Audio/Real Video Flash a) b) Maya format was developed? c) Notepad d) DreamWeaver a) 1995 b) 1982

[1]

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15. The clas derived is		e other classes are		ich one of the follow gram ?	ring	is a sound editing
		Object class	a)	JPEG	b)	Vector Graphics
/	<i>,</i>	Function class	c)	Modeling	d)	Sound Forge
	fice Writer, which center align para	key combination	,	C++, the range of int		-
a) Ctrl		Ctrl + A	a)	- 32678 to 32767		
c) Ctrl	+ E d)	Ctrl + L	b)	- 32678 to 32768		
17. In C++, c	ata members are	also called :	c)	- 32767 to 32767		
a) men	ber functions b)	attributes	d)	- 32768 to 32767		
c) meth	ods d)	objects	25. In C	++, the size of the ar	ray s	should always be :
18. In StarO	ffice Calc, whic	h bar is used to	a)	Date	b)	Positive
display th	e current cell and	its contents?	c)	Negative	d)	Float
a) Obje	a) Object bar			26. The name of the constructor must be same as		
b) State	ıs bar			of what ?		
c) Sere	ll bar		a)	object		function
<i>'</i>	nula bar		, í	class	,	method
19. Which key is used to start presentation?				2++, which of the fo ess specifier?	llow	ving is not a class
a) F2	b)	F11	a)	public	b)	private
c) F5	d)	F7	c)	pointer		protected
data or fa	- ·	lections of related		StarOffice Writer, v		-
a) Field	l b)	Database		e forward through t		
c) Reco	ord d)	Editing	a)	Shift		Ctrl
		uely identifies a	,		,	Tab
	a database table			ich keys are pressed		
a) Prim	ary b)	Network	poir	it to the end of a do	cum	ent?
c) Flat-	File d)	Hierarchical	a)	Ctrl + Home	b)	Ctrl + End
	-	ch the data and	c)	Shift + Home	d)	Shift + End
	are bound togethe is called as:	er within an object		C++, which is achie rloading and operate		÷
a) Poly	morphism b)	Object	a)	Encapsulation	b)	Polymorphism
c) Clas	s d)	Encapsulation	c)	Function	d)	Inheritance

31.	How many d	estructor can b	e 38. Whitehoperinits bankin home by using interne	T
a)	1 (one)	b) 2 (two)		
c)	3 (three)	d) 4 (four)	a) Call center	
· · · · · ·	. ,	ich one of the following	b) e-Learning	
sig	n is used to make	the cell, absolute cell	c) e-Shopping	
add	lress ?		d) e-Banking	which commond is used
a)	\$	b) #	39. In StarOffice Writer, to insert more than or	
c)	!	d) &	a) Insert \rightarrow Table -	\rightarrow Rows
		rt a range of Calc Cells	b) Table \rightarrow Insert -	\rightarrow Rows
into	o a text document :		c) Table \rightarrow Rows -	→ Insert
a)	$Edit \rightarrow Cut$		d) Format \rightarrow Rows	5
b)	Format \rightarrow Paste		40. In StarOffice Writer,	
c)	Edit \rightarrow Paste Spe	ecial	is the decorative font	?
d)	Edit \rightarrow Copy		a) Times New Ron	nan
		in this example what is	b) Symbol	
	name of the class		c) Wingdings	
a)	void		d) Fajita	
b)	add		41. In StarOffice Writer,	
c)	add : : display()		select the spelling ch	eck dialog box ?
d)	display()		a) F7	b) F6
		y operator in StarOffice	c) F5	d) F4
Cal			42. In C++, the function 42	that returns no value is
a)	!	b) <>	declared as :	
c)	==	d) #	a) void b) int	c) inline d) main
	w many times the lo $r (m = 0; m < 6; m + +)$	oop will be executed ?	43. A filter is also a type	of:
a)	6	b) 7	a) Table	b) Query
c)	5	d) 4	c) Form	d) Report
37. In t	the following snipp	et what is the scope of	44. In C++, which one	of the following is the
the	variable 'a'?		extraction or get from	n operator ?
if ({	x>y)		a) <	b) >
t	int $a = x$;		c) <<	d) >>
	a++;		45. GIF is limited to how	,
}			a) 16	b) 256
a)	file	b) function		
c)	local	d) class	c) 8	d) 32
			•	

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46.	BPO - s	tands for :	54. The most important feature of C++ is the :			
a)	Business Process	sing Outlet	a) class b) pointer			
b)	Business Process	Outsourcing	c) variable d) structure			
c)		-	55. How many main steps are there in medical transcription ?			
d) 47 W	Basic Process Ou hich is used to creat	-	a) three b) two			
		•	c) four d) five			
a)			56. Which is a self-replicating program that can cause damage to data and files stored on the			
b)	StarOffice Calc		computer ?			
c)	StarOffice Impres	SS	a) Antivirus b) Cracking			
d)			c) Piracy d) Virus			
	· · · · · · · · · · · · · · · · · · ·	ed function must differ r or their datatype of	-1.57 in ($\pm\pm$ what will be the given of the error 7			
	hich parameters ?	i of then datatype of	float y[6][4];			
a)	-	b) default	a) 24 bytes b) 48 bytes			
c)	reference	d) formal	c) 10 bytes d) 96 bytes			
49. In C++, integral promotions are purely what oriented ?			58. In C++, which is a variable that holds a memory address ?			
a)	_	b) object file	a) pointer b) constant			
c)	executable file	d) compiler	c) control structure d) loop			
	hich key combinatic database ?	on is used to save a table	$\frac{1}{2}$ 59. In C++, the array belongs to which data type ?			
			a) derived b) user defined			
a)		b) $Ctrl + A$	c) built-in d) structure			
c) 51 Th		d) Ctrl + F a margins in a document	60. Data abstraction is achieved through :			
	ould be		a) Polymorphism b) Inheritance			
a)		b) 1	c) Data Hiding d) Array			
c)		d) 2.25	61. Which view allows the user to create and edit			
	•	ns is used to print slides	slides ?			
in	StarOffice Impress	?	a) Normal viewb) Outline viewc) Notes viewd) Handouts view			
a)	Alt + P	b) Shift + P				
c)	Ctrl + P	d) Ctrl + Shift + F	62. In StarOffice Base, which is a process of joining data from two or more tables of the			
53. Which of the following is a default constructor?			same or different database ?			
a)	add(add & x)	b) add()	a) Searching b) Sorting			
c)	add(int x)	d) add(int x, int y)	c) Merging d) Filtering			

63. The body of a class is terminated by :	72. Which one of the following is simply a screen
a) , (comma) b) : (colon)	that displays the fields of a record in a well-
c) (dot) d) ; (semicolon)	spaced out manner ?
64. Which character prefix the destructor name	a) Query b) Report
in C++ ?	c) Filter d) Form
a) \sim (tilde) b) + (plus)	73. What is the error thrown by the compiler for the following snippet ?
c) ++ (increment) d) ! (NOT)	
65. In StarOffice Calc, which is used to make data	if (a <b); cout<<"Greater";</b);
easier to understand ?	else
a) formula b) functions	
c) object d) charts	cout<<"Smaller";
66. In StarOffice Calc, which icon used to	a) misplaced if b) misplaced else
insert objects from other applications into a worksheet ?	c) misplaced if else d) statement missing 74. When a derived class inherits only from one
	base class, it is known as :
a) Insert OLE objectb) Insert Applet	a) Multiple Inheritance
c) Insert Floating Frame	b) Single Inheritance
d) Insert Movie and Sound	c) Hybrid Inheritance
67. Access specifier is also referred to as :	d) Multilevel Inheritance
a) class member b) scope	75. Which is illegal access to the network or
c) inheritance d) visibility mode	computer system ?
68. In C++, which are the data items whose values	a) Piracy
cannot be changed ?	b) Virus
a) constants b) punctuators	c) Cracking
c) Keywords d) Identifiers	d) Computer Crime
69. In C++, which statement forces the next	
iteration of the loop to take place, skipping	PART-II
any code that follows it ?	Answer any twenty questions in one or two
a) continueb) breakc) returnd) size of	sentences each : $[20 \times 2 = 40]$
, , ,	76. What is meant by Word Processing ?
70. In C++, which of the following is a scope resolution operator ?	vo. what is meant by word Processing :
Ĩ	77. What is Hanging Indent?
a) : b) &	
c) * d) :: 71. Visicalc was developed in the year :	78. What is Date Arithmetic in StarOffice Calc?
· ·	79. Write a note on reference operator in
a) 1982 b) 1999	StarOffice Calc. Give example.
c) 1979 d) 1959	I

- 80. What are the three general categories of the data management task ?
- 81. What is Report?
- 82. Write about the types of video compressions.
- 83. Write a note on AVI format.
- 84. How will you change the slide background ?
- 85. What is Custom Animation?
- 86. What is the significance of an object?
- 87. Write note on impact of modifiers.
- 88. What are tokens? What are its types?
- 89. What is the use of break statement?
- 90. What are the three primary sections of C++?
- 91. What is meant by return statement ?
- 92. What is an Array ? What are its types ?
- 93. What is the use of strcmp() function ?
- 94. What are the specifications of a class ?
- 95. Write the general form of class declaration.
- 96. How are functions invoked in function overloading ?
- 97. What are the functions of a constructor ?
- 98. What are the advantages of Inheritance ?
- 99. What is Call Center ?
- 100. What is Computer Crime?

PART-III

Answer any seven questions. $[7 \times 5 = 35]$

- 101. How will you select the required portion of the text in a document using mouse, keyboard and shortcuts ?
- 102. What are the various functions of the icons in the table formatting tool bar in StarOffice Writer ?
- 103. What are functions (in StarOffice Calc) ? How will you use them in the worksheet ? Explain with an example.
- 104. Explain the various icons in the insert object floating tool bar of StarOffice Calc.
- 105. Explain the different types of Database.
- 106. Explain Exit-check loop with syntax and example.
- 107. Explain call by reference method with suitable example.
- 108. What is Operator Overloading? List its rules.
- 109. Debug the following C++ program to get the following output :

output : (Assume a = 15, b = 16)

Simple Constructor Enter Values for a and b...15 16 The two integers...15 16 The sum of the variables...31 Simple Destructor

```
Program :
```

include <iostream. H>
include < conio.h >

```
110. Find the output for the following C++
class simple
                                                    program.
ł
                                                    #include<iostream. h>
   Private:
                                                    #include<conio.h>
     int a; b;
                                                    class first
   Public
                                                    £
     simple()
                                                       int sum;
     £
                                                       protected:
     a=b=0;
     cout>>"Constructor Simple";
                                                           int num1, num2;
                                                       public:
     }
     -simple()
                                                       first()
                                                       £
     ł
     cout << "\nSimple Destructor";
                                                       num1=num2=sum=0;
     };
                                                       cout << "\n First Constructor";
     void getdata();
                                                       }
     Ł
                                                       void accept( )
       cout << "\nEnter values for a and b...";
                                                       ł
       cin << a >> b;
                                                         cout << "\nEnter the two numbers";
     }
                                                         cin>>num1>>num2;
     void putdata()
                                                       }
                                                       void plus()
     cout << "\n The two
     integers..."<<a<<'t'<<b;
                                                         sum = num1 + num 2;
     c o u t >> " \setminus n T h e
                              SUM
                                         o f
                                                         cout << "\n The sum of two numbers
variables..."<<a+b;
                                                         are..."<<sum;
     }
                                                        }
   };
                                                       };
void main []
                                                       class second : public first
£
                                                         ł
   simple s;
                                                           int sub;
   s.getdata ()
   s.Outdata ();
}
```

```
public:
                                                    {
                                                       second s;
       second()
                                                       int choice = 0;
       {
                                                       cout << "\n Enter your choice-(1 or 2)";
          sub = 0;
                                                       cout << "\n 1. Add... \n 2. Subtract...";
          cout<<"\n Second Constructor";
                                                       cin>>choice;
       }
                                                       switch(choice)
void minus( )
                                                       {
{
                                                       case 1:
   first: :accept( );
                                                         s.accept();
   sub=num1-num2;
                                                         s.plus();
   cout<<"\n The difference of two numbers
                                                         break;
are"<<sub;
                                                       case 2:
  }
                                                         s.minus();
};
                                                         break;
void main()
                                                         }
                                                    }
```

```
***
```

(ANSWERS)

PART -	
--------	--

1. (a); 2. (d); 3. (b); 4. (b); 5. (b); 6. (d); 7. (a); 8. (c); 10. (c); 9. (b); 11. (c); 12. (b); 13. (c); 14. (c); 15. (a); 16. (c); 17. (b); 18. (d); 19. (c); 20. (b); 23. (d); 26. (c); 27. (c); **21.** (a); 22. (d); 24. (d); 25. (b); 28. (d); **29.** (a); **30.** (b); **31.** (a); **32.** (a); **33.** (c); **34.** (b); 35. (b); **36.** (a); **37.** (c); **38.** (d); **39.** (b); 40. (d); **41.** (a); **42.** (a); **43.** (b); **44.** (d); 45. (c); 46. (b); 47. (c); 48. (d); 49. (d); 50. (c); 51. (b); 52. (c); **53.** (b); **54.** (a); 55. (a); 56. (d); 57. (d); **58.** (a); **59.** (a); 60. (c); 63. (d); 65. (d); 66. (a); 67. (d); 68. (a); **61.** (a); 62. (c); 64. (a); **69.** (a); 70. (d); 71. (c); 72. (d); 73. (b); 74. (b); 75. (c).

PART -II

- 76. The term *word processing* refers to the activity carried out using a computer and suitable software to create, view, edit, manipulate, transmit, store, retrieve and print documents. A document may contain text, tables, graphs, charts, equations, pictures and drawings.
- 77. This visual clue helps the reader to see how the document is divided into paragraphs. The paragraphs also indented such as quotations that are set apart from the main document text. As another option, one may want to use a special kind of indent, called a *hanging indent*, for numbered lists.
- **78.** Manual data calculations can be tricky because we have to keep track of the number of days in a month. In spreadsheets, date calculations become very simple. To add a number to a date and arrive at a new data, find the difference between two dates one can use a wide variety of function and formats.
- 79. The operators which *combine cell areas* are called Reference operators.

Operator	Name	Example
: (Colon)	Range	A1 : C108
! (Exclamation point	Intersection	SUM(A1 : B6!B5 : C12)

- 80. The categories of the data management task in DBMS are :
 - 1. Entering data into the database.
 - 2. Reordering records in the database.
 - 3. Obtaining subsets of the data.

- **81.** A report is printed information based on a query that gathers criteria-matching data and, in some cases, performs mathematical calculations.
- 82. The two types of video compressions are :
 - (*i*) Lossless compression : Retains the exact image throughout the compression.
 - *(ii)* Lossy compression : Provides a comparatively higher ratio of compression but results in some loss of quality.
- **83.** The Audio Video Interleave or AVI format was developed by Microsoft in 1992. It is supported by all computers running the *Windows operating systems* and by most of the popular browsers. It is a very common format on the Internet. Videos files stored in the AVI format have the extension .avi.
- **84.** To change the background color or the background fill of the current slide or all of the slides in the document the procedure followed is :

Choose $Format \rightarrow Page \rightarrow Background$. Select the background fill options :

Color

Gradient

Hatching

Bitmap Image

- **85.** This page displays various options that allow the user to add or modify animation effects to elements of a slide.
- **86.** An object is a group of related functions and data that serves those functions.

An object is a kind of self-sufficient 'subprogram' with a specific functional area.

- 87. The impact of modifiers.
 - *(i) unsigned* modifies the range of the integer values as the sign bit is also used to store data.
 - *(ii) long* increases the bytes for a particular data type, thus increasing the range of values.
- **88.** Tokens are the basic types of elements essential for program coding. It is the smallest individual unit in a program.



- **89.** *(i)* Break statement would exit the current loop only.
 - *(ii)* Break statement accomplishes jump from the current loop.
- **90.** A C++ Program has primarily three sections Viz.,
 - Include files
 - Declaration of variables , data type , user defined functions.
 - main() function
- **91.** Return statement marks the end of the function and also transfers control to the statement after call statement.
- **92.** An array is a collection of variables of the same type that are referenced by a common name.

The two types of array are :

- 1) One dimensional.
- 2) Multi-dimensional.

- 93. It compares the two given strings and returns 0 it strings are equal, value>0, if string 1 is greater than string 2. Otherwise value less than 0. For example, strcmp ("Abc", "Abc") returns Ostcmp ("Abc", "abc") returns a value less than ostrcmp.
- 94. A class specification has two parts. They are
 - (i) Class declaration,
 - (ii) Class function definitions.
- 95. Class class-name

{

private:

variable declaration

function declaration

protected:

variable decl.

function decl.

public:

variable decl.

function decl.

};

- **96.** The compiler adopts BEST MATCH strategy. As per this strategy, the compiler will,
 - (*i*) Look for the exact match of a function prototype with that of a function call statement.
 - *(ii)* In case an exact match is not available, it looks for the next nearest match. That is, the compiler will promote integral data promotions and then match the call statement will function prototype.

- 97. Functions of constructor are:
 - *(i)* The constructor function initializes the class object.
 - (ii) The memory space is allocated to an object.
- 98. The advantages of Inheritance are:
 - *(i)* **Reusability of code.** Many applications are developed in an organization.
 - *(ii)* **Code sharing.** The method of the base class can be shared by the derived class.
 - *(iii)* Consistency of interface. The inherited attributes and methods provide a similar interface to the calling methods.
- **99.** A call center is sometimes defined as a telephone based shared service center for specific customer activities and are used for number of customer-related functions like marketing, selling, information transfer, advice, technical support and so on. A call center has adequate telecom facilities, trained consultants, access to wide database, Internet and other on-line information support to provide information and support services to customers. It operates to provide round the clock and year round service i.e., 24×365 service.
- **100.** A computer crime is any illegal activity using computer software, data or access as the object, subject or instrument of the crime.

PART -III

101. Steps to select the text with mouse :

- 1. Insertion point is moved to the start of the text to be selected.
- 2. The left mouse button should be clicked, held down and dragged across the text to be selected.

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When the intended text is selected the mouse button should be released.

Steps to select text with keyboard :

- 1. Insertion point is moved to the start of the text to be selected.
- 2. The *Shift key* is pressed down and the movement keys are used to highlight the required text.
- 3. When the *Shift key* is released, the text is selected.

Action to be performed	To select what
Double click on a word	To select a word
Click once next to the line	To select the particular line
Press Ctrl + A	To select the entire document

102. The function of each icon in the toolbar are :

- Table Fixed.

____ – Table Fixed, Proportional.

- 🔄 Table Variable.
- Merge cells : This icon is used to combine two or more cells into a single cell.
- Split cells : This icons is used to split a cell into two or more cells.
- Optimise : Clicking on this icon displays a pop-up menu with options like Space columns equally, Space rows equally, Optimum row height and Optimum Column width.
- **Inserting Row :** This icon is used to insert a row below the current row.

- Inserting Column : This icon inserts a column to the right of the current column.
- **Delete Row :** This icon deletes the current row from the table.
- **Delete Column :** This icon deletes the current column from the table.
- **Borders :** This icon display a floating toolbar with different border option for the table.
- **Line Style :** This icon is used to choose the style of line to be used for the borders.
- **Border Colour :** Clicking on this icon displays a palette of colours that can be used as a border colour for the table.
- **103.**StarOffice Calc has a wide variety of functions that allow you to perform several frequently done calculations. Functions are predefined formulae that are available in StarOffice Calc.

To select a function, go to *Insert* menu and Select the *Function* options. The *Function Wizard* dialog box appears. A list of all functions is displayed in the *Function* box when *All* is selected in the *Category box*. If a category is selected (e.g. Mathematical) the functions related to that category alone will be displayed in the function box.

To select a function.

- (i) Select the category in the Category box.
- (ii) Scroll down the list to find the function you want. Click once on the function name to see a short description of that function on the right side of the window. Double-click on it to insert it into the worksheet.

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(fx) The Function Wizard shortcut icon on the formula bar can also be used to select and insert functions.

For example, to insert the SQRT function place the cursor in the cell where the user want to insert the function and click on the *Function Wizard* icon. Select *Mathematical* from *Category*. Select the SQRT function from the list of functions, which appears by double clicking on it. The Function Wizard displays a brief description of the function and prompts the user to enter the number or the cell address on which the function should work. Enter the number *64*.

Now click on OK, the result is displayed in the cell in the worksheet.

 Σ One of the most commonly used function is the *Sum* function. This function calculates the sum of a given set of numbers. To use this function, in the worksheet, to calculate the total in cell G3, the steps are:

- *(i)* Click on the cell G3 to place the cursor there.
- (*ii*) Click on the *Sum* icon on the function bar. = *SUM* (*C3:F3*) appears in the cell.
- (iii) Press *Enter* to accept the suggested range.

The result, is displayed in the cell G3.

104. To get *Insert Object* floating toolbar, click on *View* \rightarrow *Toolbar* \rightarrow *Insert* Object option. It displays with following icons :

1. Insert chart icon : 🕖

This icon is used for presenting the data in the worksheet in the form of charts of different kinds such as bar chart, pie, chart, lines, X-Y plot, etc.

2. Insert Formula icon : Va

This icon is used for inserting a formula in the worksheet for performing calculations.

3. Insert Floating Frame icon :

This icon is used to generate a scrolling screen within a worksheet.

4. Insert Movie and Sound icon :

This icon is used to insert sound or video files into the current worksheet.

5. Insert OLE object icon :

This icon is used to insert objects from other application into a worksheet.

6. Insert Applet icon : 4.

This icon is used to import Java Applets into the worksheet.

- **105.**The classification of Database based on conceptual structures are :
 - (i) Flat-File Database. A database file that consists of a single data table is a Flatfile database. Flat-file database can be quite useful for certain single-user or small-group situations, especially for maintaining lists such as address lists or inventories. Data that is stored, managed. and manipulated in spreadsheet is another example of a flat-file database.
 - (*ii*) **Relational database.** A relational structure represents a database made up of a set of related tables. In a relational database, one or more common fields existing in two or more tables create a relationship between these tables. The common field or fields are called the Keys.

A *primary key* is a key that uniquely identifies a record in a database table. In relational database, a primary key can consist of one of more fields.

The relational database structure is the most prevalent database in today's business organizations.

- (iii) Hierarchical database. The hierarchical database structures were primarily used on Main Frame computers. In hierarchical database, records are organized in a tree like structure by type. The relationship between record types is said to be a parent-child relationship, in which any child type relates only to a single parent types.
- (iv) Network database. The Network database is very similar to the hierarchical structure except that any one record type can relate to any number of other record types.
- (v) Object Oriented database. The object oriented structure groups data items and their associated characteristics. attributes and procedures into complex items called objects. Physically and object can be anything: a product or event, such as a house, an appliance, an art piece, a customer complaint, or even a purchase. An object is defined as, an art piece, a customer complaint, or even a purchase. An object is defined by its characteristics, attributes and procedures. An objects characteristics can be text. sound, graphics and video. Examples of attributes might be colour, size, style, quantity and price. A procedure refers to the processing or handling that can be a associated to the object

106.Do ... while <(condition)> is called exit-check loop, as the condition(test expression) marks the last statement of the body of the loop.

The construct of a do ... while loop is :

```
do
      ł
    action block ;
    } while <(condition)>;
Example:
# include <iostream.h>
# include <conio h>
void main ()
    int i = 10; choice = 1;
    do
    {
        cout \ll i;
        i ++;
    }
    getch();
    Output:
```

£

}

Infinite loop

107.In call by reference method, the called function arguments-formal parameters become alias to the actual parameters in the calling function. This means that when the

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```
function is working with its own arguments
it is actually working on the original data. Let
us now rewrite the function using reference
parameters.
```

```
# include <iostream.h>
  # include <conio.h>
  void swap (int &n1, int &n2)
  ł
       int temp;
       temp = n1;
       n1 = n2;
       n2 = temp;
       cout << `\n' << n1
           <<`\t`<<n2<<`\n`;
  }
  void main ()
  {
       int m1 = 10, m2 = 20;
       clrscr();
cout<<'\nValues before swap call''<< '\t'
\ll m1 \ll '\t\ \ll m2;
swap(m1,m2);
cout << "\n Calling sawp..";
cout << "\n Back to mai.... Values are"
<<`\t'<< m1 << `\t'<< m2;
```

	g	etch ();		
	}			
	0	utput :		
	V	alues before invoking swap	10	20
	С	alling swap	20	10
	В	ack to main Values are	20	10
108		nechanism of giving special r perator is called operator ove		
	Rule	s for overloading operators	s:	
		e are certain restrictions and rerloading operators. They ar		ations
	(i)	Only existing operator overloaded. New operators created.		
	(ii)	The overloaded operator muleast one operand of user de		
	(iii)	The basic definition of ar cannot be replaced or in ot one cannot redefine the fu an operator. One can give functions to an operator	ther v unctio	vords on of
	(iv)	Overloaded operators behas same way as the basic op terms of their operands.		
	(v)	When binary operators are o the left hand object must be of the relevant class		
	(vi)	Binary operators overloade a member function take or argument.		-

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109.

Line No	Error Code	Correct Code
1	#include <iostream.h></iostream.h>	#include <iostream.h></iostream.h>
2	Private:	private:
3	int a;b;	int a,b
4	Public	public:
5	cout>>"Constructor Simple";	cout<<" Simple Constructor";
6	-simple()	~simple()
7	void getdata();	void getdata()
8	cin< <a>>b;	cin>>a>>b;
9	cout<<"\nThe two integers"< <a<<'\t'<<b;< th=""><th>cout<<"\nThe two integers" <<a<<"\t"<<b;< th=""></a<<"\t"<<b;<></th></a<<'\t'<<b;<>	cout<<"\nThe two integers" < <a<<"\t"<<b;< th=""></a<<"\t"<<b;<>
10	cout>>"\nThe SUM of variales"< <a+b;< td=""><td>cout<<"\nThe SUM of variales"<<a+b;< td=""></a+b;<></td></a+b;<>	cout<<"\nThe SUM of variales"< <a+b;< td=""></a+b;<>
11	void main[]	void main ()
12	s.getdata()	s.getdata();
13	s.Outdata();	s.putdata();

110. **Out** put

No	(if choice=1)	(if choice=2)
1	First Constructor	First Constructor
	Second Constructor	Second Constructor
	Enter your choice-(1 or 2)	Enter your choice-(1 or 2)
	1.Add	1.Add
	2.Subtract1	2.Subtract2
	Enter the two numbers 10 5	Enter the two numbers 10 5
	The Sum of two numbers are15	The difference of two numbers are5