HALF YEARLY EXAMINATION, DEC-2017
XII – STANDARD
COMPUTER SCIENCE
ANSWER KEY
PART – I

Choose the correct answer: **75 x 1 = 75**

Q.NO	ANSWER	Q.NO	ANSWER
1.	D) Ctrl + Home	39.	C) void
2.	D) Replace with	40.	A) \t
3.	A) Points	41.	B) ?:
4.	D) Red	42.	A) if
5.	C) Single	43.	B) 5
6.	B) Shift + Tab	44.	C) three
7.	C) Table→ Insert →Rows	45.	D) switch
8.	A) Page preview	46.	A) 1234
9.	D) View→ Ruler	47.	B) File
10.	C) Formula Bar	48.	C) return
11.	C) <>	49.	A) , (comma)
12.	A) Page	50.	B) int
13.	C) 63, 254	51.	D) Two
14.	C) Lotus Corporation	52.	A) Fourth
15.	C) =	53.	D) strcmp()
16.	B) A1	54.	A) static
17.	D) Filtering	55.	D) private
18.	B) 20	56.	A) . (dot)
19.	C) Hierarchical	57.	B) instance
20.	A) Insert	58.	D) 8
21.	B) SQL	59.	D) 3
22.	C) Information	60.	B) Operator Overloading
23.	A) File	61.	B) user defined
24.	B) Three	62.	D) array
25.	A) Edit →Paste Special	63.	B) Destructors
26.	D) Virtual Reality	64.	A) simple
27.	C) Vector Graphics Cards	65.	C) parameterized
28.	B) 1995	66.	D) Copy
29.	A) 8	67.	C) Constructors
30.	C) Macromedia	68.	B) single colon (:)
31.	A) Slide →Rename Slide	69.	A) Properties
32.	B) Box	70.	B) e-Banking
33.	C) Edit → Navigator	71.	D) Memo frame
34.	D) Default	72.	D) Data Management
35.	C) Custom animation	73.	C) Three
36.	A) Class	74.	A) Cracking
37.	B) Class	75.	B) Personal security
38.	D) 0	76.	-

PART – II

Answer any 20 from the following questions: **20 x 2 = 40**

Q.NO	ANSWER	MARK
76.	**Selecting 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.	2
77.	❖ To create a header, **Format → Page** command can be used. Now page style dialog box appears on the screen. ❖ Now **Header** tab on the **Page Style** dialog box can be used. In this dialog box, the **Header on** check box is clicked. ❖ Four spin boxes are also displayed. In those spin boxes the distance of the header from the text area, the header height, the distance from the left margin and the right margin are entered.	2
78.	A continuous group of cells in a worksheet is called a **Range**.	2
79.	Any four from the following, • Payment of bills • Income tax calculations • Invoices or bills • Account Statements • Inventory Control • Cost-Benefits Analysis • Financial Accounting • Tender Evaluation • Result analysis of students	2
80.	❖ A DMBS is a program, or collection of programs that allows any number of users to access data, modify it (if necessary), and construct simple and complex requests to obtain and work with selected records. **(OR)** ❖ A DBMS is a software tool that allows users to create database tables and that provides access to multiple users.	2
81.	❖ A **primary key** is a key that uniquely identifies a record in a database table. ❖ In relational databases, a primary key can consist of one or more fields. ❖ The primary key becomes very important when there are multiple tables, with common fields.	2
82.	❖ The various multimedia components are coordinated with a technique called virtual reality. ❖ They provide an environment which is experienced by users as similar to reality.	2

83.	❖ Object-based animations, also referred to as slide or path animations are created by moving an object across a screen. ❖ This type of animations is usually seen in computer games. ❖ For example, a ball moving across the screen.	2
84.	❖ This page can be used to specify basic background information that needs to be included in all the slides. ❖ For example, you can insert a company logo to the master slide and it will appear in all the slides.	2
85.	❖ This page displays various transition effects that can be attached to a slide along with other options that allow you to control the transition of the slides. ❖ Note that you can have a different transition for each slide in the presentation.	2
86.	❖ The mechanism by which the data and functions are bound together within an object definition is called as ENCAPSULATION.	2
87.	❖ A ternary operator (?:) is also called as conditional operator. **The general syntax is** E1 ? E2 : E3 ❖ where E1, E2, E3 are operands. E1 should essentially be of scalar type, E2 and E3 are values or statements. **For example,** max = (num1 > num2) ? num1 : num2;	2
88.	❖ String Literal is a sequence of characters surrounded by double quotes. ❖ String literals are treated as array of characters. ❖ Each string literal is by default added with a special character '\0' which marks the end of a string. **For example**, "testing"	2
89.	❖ Operators are executed in the order of precedence. The operands and the operators are grouped in a specific logical way for evaluation. ❖ This logical grouping is called as association.	2
90.	❖ An outer loop and inner loop cannot have the same control variable, as it will lead to logical errors ❖ The inner loop must be completely nested inside the body of the outer loop.	2
91.	The prototype provides the following information to the compiler. 1. Number and type of arguments. 2. The types of return values.	2
92.	❖ An array in C++ is a derived data type that can hold several values of the same type. ❖ An array is a collection of variables of the same type that are referenced by a common name. For example, int a[5][6];	2

93.	There are two methods to display the content of string. 1. cout - **Eg:** cout<<name; 2. cout.write() - **Eg:** cout.write(name, i);	2
94.	❖ Class comprises of members. Members are further classified as Data Members and Member functions. ❖ Data members are the data variables that represent the features or properties of a class. Data members are called as attributes. ❖ Member functions are the functions that perform specific tasks in a class. Member functions are called as methods.	2
95.	❖ Instruments allowing only selected access of components to objects and to members of other classes is called as **Data Abstraction.** Or rather Data abstraction is achieved through data hiding.	2
96.	❖ The compiler adopts BEST MATCH strategy. As per this strategy, the compiler will, ✓ The compiler will look for the exact match of a function prototype with that of a function call statement. ✓ In case an exact match is not available, it looks for the next nearest match.	2
97.	1. The destructor has the same name, also prefixed by the tilde character '~'. 2. The destructor cannot have arguments. 3. It has no return type. 4. Destructors cannot be overloaded i.e., there can be only one destructor in a class. 5. The compiler generates a destructor, in the absence of a user defined destructor. 6. The destructor is executed automatically when the control reaches the end of class scope.	2
98.	❖ The constructors are executed in the order of inherited class. That is, from base constructor to derived. ❖ The destructors are executed in the reverse order.	2
99.	❖ e-Learning that enables online educational programs leading to degrees and certifications.	2
100.	❖ A virus is a self-replicating program that can cause damage to data and files stored on your computer.	2

PART – III

Answer any 7 from the following questions: **7 x 5 = 35**

Q.NO	ANSWER	MARK
101.	**Find and Replace:** 1. Choose **Edit** → **Find** & **Replace**. The Find & Replace dialog box appears on the screen. 2. In the **Search for** box, type the text that you want to find in your document. 3. In the **Replace with** box, enter the replacement word or phrase. 4. Click **Find** to start the search. 5. When Writer finds the first instance of the word or phrase, do one of the following: • To replace the found instance of the text with what you entered in the Replace with box, click **Replace**. • To replace all instances of the text with what you entered in the Replace with box, click **Replace All**. • To skip the found text and to continue the search, click **Find** again. 6. Click **Close** when you have finished the search.	5
102.	The following steps are used for a spell check after the document is typed: ❖ **Tools** → **Spelling** → **Check** is selected or  is clicked. To check a part of the document only that portion is selected. The **F7** key may also be pressed to select the spelling command. ❖ **Not in dictionary** text area displays the misspelled word and the **Suggestions** list displays any alternative spellings. **Any of the following can be done:** ❖ To skip this occurrence but stop on the next one. **Ignore Once** button is clicked. To skip all occurrences of this word. **Ignore All** button is clicked. ❖ To replace the word with one of the selected spellings, in the suggestions list that spelling is clicked, and **Change** button is clicked to change this occurrence and **Change All** button is clicked to replace all occurrences of the word. ❖ If none of the replacements is correct, correction can be made manually in the **Not in dictionary** text area. **Add** button is clicked to add the word to the dictionary.	5
103.	**Advantages of electronic spreadsheet:** ❖ Calculations are automated through the built-in mathematical, financial and statistical functions. ❖ Accurate results to any desired level of decimal points are possible ❖ Worksheets can be quite big in size ❖ Any part of the worksheet can be viewed or edited. ❖ Worksheet can be saved and retrieved later. ❖ Any part or whole of an existing worksheet can be merged with any existing or new worksheet. ❖ Any part or whole of the worksheet can be printed in a desired format. ❖ Worksheet data can be viewed in the form of graphs or charts ❖ The worksheet information can be transferred to any database or word processing software.	5

104.	**Fill Command:** ❖ AutoFill automatically generates a data series based on a defined pattern. 1. On a sheet, click in cell, and type a number. 2. Drag the fill handle in the bottom right corner of the cell across the cells that you want to fill, and release the mouse button. ❖ You can also use the Fill command to generate a series of data directly from the values of the selected cells. ❖ First, select the cells of the worksheet that you want to fill. ❖ Choose the command **Edit → Fill → Series**. Select the type of series from the options that appear on the screen. **For example,** select the range A1:D6 in the worksheet. Click on **Edit →Fill → Series**. Choose 2 as your **Start value** 2 as your **Increment** **Growth** as the **Type**, and **Down** as the **Direction**. Now, click on **OK.** **(OR)** Any relevant Example	5
105.	**Advantages of computerized data processing:** ❖ Once we collect and enter the data into a computer system, We can perform other operations with less manual labour. So, manpower is considerable saved. ❖ Though it takes some time to develop, test and put the required computer programs to use, the processing speed is fast, reducing the processing time, in certain cases, from man-years and man-months to minutes and seconds. ❖ The chances of errors are less in computerized data processing. ❖ We can store large amount of the data and information in the computer storage medium, which is compact. Hence, we need not store bundles of paper records, thus saving space. ❖ Today computer networks are so common that we can share data and resources from one computer system to the other at a very fast speed and with very little effort, as in the case of railway and airline reservation systems. ❖ It is easy to edit the data including correction, changes and modifications. ❖ Computerized database is highly effective for searching, sorting and merging files and for other data manipulation activities.	5

Loops:

- Loops execute a set of instructions repeatedly for a certain number of times.
- There are three kinds of loops in C++, the **for** loop, the **while** loop and the **do .. while** loop.

While loop:

- While loop is also called as entry check loop.
- The body of the while loop will be executed only if the test expression results true placed in the while statement.
- The control exits the loop once the test expression evaluated to false.

Syntax:

```
while(condition)
{
……..
body of the loop;
…….
}
```

106. **For example:** 5

```
#include<iostream.h>
#include<conio.h>
void main()
{
clrscr();
int n, s = 0, i = 1;
cout<<"ENTER THE VALUE OF N\n";
cin>>n;
while(i<=n)
{
s = s + i;
i = i + 1;
}
cout<<"THE RESULT IS\n";
cout<<s;
getch();
}
```

(OR) Explain any one loop.

107.	**Type of scope rules of variables:** ❖ Scope refers to the accessibility of a variable. There are four types of scopes in C++. They are, 1. Local scope 2. Function scope 3. File scope 4. Class scope **Local scope:** ❖ A local variable is defined within a block. ❖ The scope of a local variable is the block in which it is defined. ❖ A local variable cannot be accessed from outside the block of its declaration. ❖ Local variables are not known outside their own code block. A block of code begins and ends with curly braces { }. ❖ The life time of a local scope variable is the life time of the block in its state of execution. ❖ Local variable are die when its block execution is completed. ❖ A local variable is created upon entry into its block and destroyed upon exit. **Function scope** ❖ The scope of variables declared within a function is extended to the function block, and all sub-blocks therein. ❖ The variable is accessible in the function main ( ) only. It is accessible in all the sub-blocks therein - viz, while block & if block. ❖ The life time of a function scope variable is the life time of the function block. ❖ The scope of formal parameters is function scope. **File scope:** ❖ A variable declared above all blocks and functions has the scope of a file. ❖ The scope of a file scope variable is the entire program. ❖ The life time of a file scope variable is the life time of a program. **Class scope:** ❖ The data variables declared within the class has the scope of a class. ❖ Their scope will be decided by the access specifier private, protected, public. ❖ The life time of a class scope variable is the life time of the class.	5
108.	**Function overloading:** ❖ The ability of the function to process the message or data in more than one form is called as function overloading. ❖ Function overloading is one of the facets of C++ that supports object oriented programming. **Rules for function overloading:** 1. Each overloaded function must differ either by the number of its formal parameters or their data types 2. The return type of overloaded functions may or may not be the same data type 3. The default arguments of overloaded functions are not considered by the C++ compiler as part of the parameter list 4. Do not use the same function name for two unrelated functions	5

109.

L.NO	GIVEN CODE	CORRECT CODE
1	include<iostream.h>	#include<iostream.h>
2	class first;	class first
4	publicly:	public:
5	x1, x2;	**int** x1, x2, **x3**;
6	Void assign{}	**v**oid assign( )
12	}	**};**
13	class second::public first{}	class second **:** public first
15	Visibility mode missing	**public:**
23	cout<<y1<<'\n'<<y2<<'\t'<<y3;	cout<<y1<<'\n'<<y2<<**'\n'**<<y3;
25	}	**};**
28	secondobj;	second obj;
30	};	}

5

110.

OUTPUT:

Constructor without parameter
parameterized constructor
Object1
The numbers are 18 16
Result 2
Object2
The numbers are 16 4
Result 12

5s

(Dear Students, if any doubt in First Volume or Second Volume please contact)

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