

**HIGHER SECONDARY HALF YEARLY EXAMINATION – DEC 2017****XII - COMPUTER SCIENCE – ANSWER KEY**

| Q.NO. | ANSWER | Q.NO. | ANSWER |
|-------|--------|-------|--------|
| 1     | D      | 41    | B      |
| 2     | D      | 42    | A      |
| 3     | A      | 43    | B      |
| 4     | D      | 44    | C      |
| 5     | C      | 45    | D      |
| 6     | B      | 46    | A      |
| 7     | C      | 47    | B      |
| 8     | A      | 48    | C      |
| 9     | D      | 49    | A      |
| 10    | C      | 50    | B      |
| 11    | C      | 51    | D      |
| 12    | A      | 52    | A      |
| 13    | C      | 53    | D      |
| 14    | C      | 54    | A      |
| 15    | C      | 55    | D      |
| 16    | B      | 56    | A      |
| 17    | D      | 57    | B      |
| 18    | B      | 58    | D      |
| 19    | C      | 59    | D      |
| 20    | A      | 60    | B      |
| 21    | B      | 61    | B      |
| 22    | C      | 62    | D      |
| 23    | A      | 63    | B      |
| 24    | B      | 64    | A      |
| 25    | A      | 65    | C      |
| 26    | D      | 66    | D      |
| 27    | C      | 67    | C      |
| 28    | B      | 68    | B      |
| 29    | A      | 69    | A      |
| 30    | C      | 70    | B      |
| 31    | A      | 71    | D      |
| 32    | B      | 72    | D      |
| 33    | C      | 73    | C      |
| 34    | D      | 74    | A      |
| 35    | C      | 75    | B      |
| 36    | A      |       |        |
| 37    | B      |       |        |
| 38    | D      |       |        |
| 39    | C      |       |        |
| 40    | A      |       |        |

**PART - II**

|    |   |        |
|----|---|--------|
| 76 | 1. Insertion point is moved to the start of the text to be selected.<br>2. The Shift key is pressed down and the movement keys are used to highlight the required text.<br>3. When the Shift key is released, the text is selected.   | 1<br>1 |
| 77 | Format→Page, select the Header tab on the Page Style dialog box.<br>The Header on check box is clicked. Four spin boxes are also displayed. Click ok.   | 1<br>1 |
| 78 | A continuous group of cells in a worksheet is called a range  | 2      |
| 79 | (any 4) •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 DBMS 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. The biggest asset of the DBMS is its ability to provide extremely quick access and retrieval from large databases. | 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.<br>Any relevant example   | 1<br>1 |
| 82 | It provides an environment which is experienced by users as similar to reality. This technique is used in some arcade games and also in flight simulators, to impart training to pilots, without having to go for a real flight.  | 2      |
| 83 | It is also known as slide or path animations, are created by moving an object across a screen. This type of animations are 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  | 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.<br>Any relevant example  | 1<br>1 |
| 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.  | 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 | 1. An outer loop and inner loop cannot have the same control variable, as it will lead to logical errors<br>2. The inner loop must be completely nested inside the body of the outer loop   | 1<br>1 |
| 91 | 1. Number and type of arguments<br>2. The type of return values   | 1<br>1 |

|                          |   |                  |
|--------------------------|---|------------------|
| 92                       | An array is a collection of variables of the same type that are referenced by a common name.<br>int mark[5][5]; (Relevant example for two dimensional array)  | 1<br>1           |
| 93                       | 1. cout << name - this is similar to any other variable.<br>2. cout.write (pincode, 7);   | 1<br>1           |
| 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. Member functions are the functions that perform specific tasks in a class. Member functions are called as methods, and data members are also called as attributes.   | 1<br>1           |
| 95                       | Instruments allowing only selected access of components to objects and to members of other classes.   | 2                |
| 96                       | The compiler adopts BEST MATCH strategy.<br>i) Compiler will 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.   | 1<br>1           |
| 97                       | (any four)<br>1) The destructor has the same name as that of the class prefixed by the tilde character '~'.<br>2) The destructor cannot have arguments.<br>3) It has no return type.<br>4) Destructors cannot be overloaded i.e., there can be only one destructor in a class<br>5) In the absence of user defined destructor, it is generated by the compiler<br>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 i.e., from base constructor to derived. The destructors are executed in the reverse order   | 1<br>1           |
| 99                       | e-Learning that enables online educational programs leading to degrees and certifications.  | 2                |
| 100                      | It is a self-replicating program that can cause damage to data and files stored on your computer.   | 2                |
| <b><u>PART - III</u></b> |   |                  |
| 101                      | 1. Choose Edit→Find & Replace.<br>2. In the Search for box, type the text that you want to find in your document.<br>3. In the Replace with box, enter the replacement word or phrase. }<br>4. Click Find to start the search.<br>5. When Writer finds the first instance of the word or phrase, do one of the following:<br>• To replace the found instance of the text with what you entered in the Replace with box, click Replace.<br>• To replace all instances of the text with what you entered in the Replace with box, click Replace All.<br>• To skip the found text and to continue the search, click Find again. }<br>6. Click Close when you have finished the search. | 1<br>1<br>3      |
| 102                      | • Tools → spelling → check (or) click spellcheck icon (or) press F7<br>• Not in dictionary text area displays the misspelled word and the Suggestions list displays any alternative spellings.<br>• Ignore once, Ignore all, Change, Change all should be explained<br>• Add button is clicked to add the word to dictionary  | 1<br>1<br>2<br>1 |
| 103                      | (Any 5)   | 5                |

|     |   |  |
|-----|---|--|
|     | <ul style="list-style-type: none"> <li>• Calculations are automated through the built-in mathematical, financial and statistical functions.</li> <li>• Accurate results to any desired level of decimal points are possible</li> <li>• Worksheets can be quite big in size</li> <li>• Any part of the worksheet can be viewed or edited.</li> <li>• Worksheet can be saved and retrieved later.</li> <li>• Any part or whole of an existing worksheet can be merged with any existing or new worksheet.</li> <li>• Any part or whole of the worksheet can be printed in a desired format.</li> <li>• Worksheet data can be viewed in the form of graphs or charts</li> <li>• The worksheet information can be transferred to any database or word processing software.</li> </ul>   |  |
| 104 | <p>AutoFill automatically generates a data series based on a defined pattern.</p> <ol style="list-style-type: none"> <li>1. On a sheet, click in cell, and type a number.</li> <li>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.</li> </ol> <p>Example : if you want to enter numbers in the cells of a column in an increasing order with a difference of 3 between subsequent cell values,</p> <ol style="list-style-type: none"> <li>1. Enter initial value in the first cell.</li> <li>2. Select the direction</li> <li>3. Click Edit→Fill→Series</li> <li>4. Select type as linear</li> <li>5. Enter end value</li> <li>6. Enter increment as 3</li> </ol> <p>Click ok button.</p>  | 2<br><br><br><br><br><br><br><br><br><br><br><br>3 |
| 105 | <p>(any 5)</p> <ol style="list-style-type: none"> <li>1. 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.</li> <li>2. 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.</li> <li>3. The chances of errors are less in computerized data processing.</li> <li>4. 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.</li> <li>5. 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.</li> <li>6. It is easy to edit the data including correction, changes and modifications.</li> <li>7. Computerized database is highly effective for searching, sorting and merging files and for other data manipulation activities.</li> </ol> | 5  |
| 106 | <p>Loops execute a set of instructions repeatedly for a certain number of times.</p> <p>Explain any one loop i) while ii) do..while iii) for</p> <p>Definition</p> <p>Syntax</p> <p>Any relevant example</p>  | 1<br><br><br>2<br><br><br>1<br><br><br>1           |
| 107 | <p>Scope refers to the accessibility of a variable.</p> <p>Four types : Local scope, Function scope, File scope and Class scope</p> <p>Local scope: A local variable is defined within a block. These variables cannot be accessed from outside the block of its declaration.</p> <p>Function scope: The variable declared within a function is extended to the function block, and all</p>   | 1<br><br><br>1                                     |

|             | <p>sub-blocks therein. The life time of a function scope is the life time of the function block.</p> <p>File scope : A variable declared above all blocks and functions (above main ( ) ). The scope of a file scope variable is the entire program.</p> <p>Class scope: The data variables which are declared within the class. Their scope will be decided by the access specifiers private, protected and public.</p>  | <p>1</p> <p>1</p> <p>1</p>          |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
|-------------|---|-------------------------------------|------------|--------------|---|--------------|-------------|---|-----------|---------|---|--------|------------|---|---------------|---------------|----|---|----|----|------------------------------|---------------------------|----|-----------------|---------------|----|-----------------|----------------|----|---|----|----|------------|-------------|----|----|---|----------|
| 108         | <p>The ability of the function to process the message or data in more than one form is called as function overloading.</p> <p>Any relevant example</p> <p>Program prototype explanation</p> <p>Rules</p>  | <p>1</p> <p>1</p> <p>1</p> <p>2</p> |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 109         | <p>Any ten errors</p> <table border="1"> <thead> <tr> <th>Line number</th> <th>Given code</th> <th>Correct code</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Class first;</td> <td>class first</td> </tr> <tr> <td>4</td> <td>Publicly:</td> <td>public:</td> </tr> <tr> <td>5</td> <td>x1,x2;</td> <td>int x1,x2;</td> </tr> <tr> <td>6</td> <td>Void assign{}</td> <td>void assign()</td> </tr> <tr> <td>10</td> <td>}</td> <td>};</td> </tr> <tr> <td>11</td> <td>class second::public first{}</td> <td>class second:public first</td> </tr> <tr> <td>13</td> <td>int y1,y2,,:y3;</td> <td>int y1,y2,y3;</td> </tr> <tr> <td>14</td> <td>first:assign();</td> <td>first.assign()</td> </tr> <tr> <td>20</td> <td>}</td> <td>};</td> </tr> <tr> <td>22</td> <td>secondobj;</td> <td>second obj;</td> </tr> <tr> <td>24</td> <td>};</td> <td>}</td> </tr> </tbody> </table> | Line number                         | Given code | Correct code | 2 | Class first; | class first | 4 | Publicly: | public: | 5 | x1,x2; | int x1,x2; | 6 | Void assign{} | void assign() | 10 | } | }; | 11 | class second::public first{} | class second:public first | 13 | int y1,y2,,:y3; | int y1,y2,y3; | 14 | first:assign(); | first.assign() | 20 | } | }; | 22 | secondobj; | second obj; | 24 | }; | } | <p>5</p> |
| Line number | Given code  | Correct code                        |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 2           | Class first;  | class first                         |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 4           | Publicly:   | public:                             |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 5           | x1,x2;  | int x1,x2;                          |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 6           | Void assign{}   | void assign()                       |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 10          | }   | };                                  |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 11          | class second::public first{}  | class second:public first           |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 13          | int y1,y2,,:y3;   | int y1,y2,y3;                       |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 14          | first:assign();   | first.assign()                      |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 20          | }   | };                                  |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 22          | secondobj;  | second obj;                         |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 24          | };  | }                                   |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
| 110         | <p>Constructor without parameters...</p> <p>Parameterized constructor...</p> <p>object1</p> <p>The numbers are 18 16</p> <p>Result 2</p> <p>object2</p> <p>The numbers are 16 4</p> <p>Result 12</p>  | <p>5</p>                            |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |
|             | <p style="text-align: center;">Prepared by,<br/> <b>R.Pradeep M.C.A., B.Ed.,</b><br/> <b>PG Asst in Computer Science,</b><br/> <b>Lotus Matric Hr Sec School,</b><br/> <b>Kakpalayam, Salem-637504.</b></p>   |                                     |            |              |   |              |             |   |           |         |   |        |            |   |               |               |    |   |    |    |                              |                           |    |                 |               |    |                 |                |    |   |    |    |            |             |    |    |   |          |