**[COMPUTER SCIENCE](http://www.result.pk)**

[For Class X (marks 55)](http://www.result.pk)

**[1. Data Representation](http://www.result.pk)**

[i. Data definition:](http://www.result.pk)

* [Numeric, alphabetic and alphanumeric](http://www.result.pk)

[ii. Number systems:](http://www.result.pk)

* [Decimal, Binary, Octal & Hexadecimal](http://www.result.pk)

[iii. Number system conversion](http://www.result.pk)

[iv. Representation of numbers using (1’s) and (2’s) complements](http://www.result.pk)

[v. Binary arithmetic:](http://www.result.pk)

[- Addition, subtraction, multiplication and division](http://www.result.pk)

[vi. Fixed and floating point number representation](http://www.result.pk)

[vii. Code:](http://www.result.pk)

[- Coding scheme (Binary Coded Decimal, ASCII)](http://www.result.pk)

**[2. Boolean Algebra](http://www.result.pk)**

[i. Boolean constant, variable, logical operators, Boolean expressions, Boolean functions](http://www.result.pk)

[ii. Laws and theorems of Boolean algebra](http://www.result.pk)

[iii. Truth tables](http://www.result.pk)

[iv. Simplification of Boolean functions, laws and Karnaugh maps](http://www.result.pk)

**[3. Problem Solving](http://www.result.pk)**

[i. Defining the problem](http://www.result.pk)

[ii. Analysis of the problem, illustrated with examples](http://www.result.pk)

[iii. Algorithms](http://www.result.pk)

[iv. Flow charts:](http://www.result.pk)

* + [Flow charts symbols, examples of flow charts using daily life applications](http://www.result.pk)

[v. Computer programming:](http://www.result.pk)

* + - * [Conversion of flow chart, algorithm into computer language instructions](http://www.result.pk)

[vi. Running and debugging programs](http://www.result.pk)

[vii. Implementation](http://www.result.pk)

[viii. Documentation](http://www.result.pk)

**[4. Data Types Assignment (INPUT/OUTPUT) Statement](http://www.result.pk)**

[i. Character sets, reserved words, commands and statements](http://www.result.pk)

[ii. Numeric and strings](http://www.result.pk)

[iii. Constants and variables](http://www.result.pk)

[iv. Operators: arithmetic, relational and logical](http://www.result.pk)

[v. Hierarchy of operators, expressions](http://www.result.pk)

[vi. Arithmetic, relational and logical](http://www.result.pk)

[vii. Assignment statements](http://www.result.pk)

[viii. Input, READ-DATA](http://www.result.pk)

[ix. PRINT, PRINT USING](http://www.result.pk)

**[5. Control Statements](http://www.result.pk)**

[i. Go to, ON – GO TO](http://www.result.pk)

[ii. If – Then – Else, on Error – Go to…](http://www.result.pk)

[iii. For … Next statement, While and Wend statement, Loops and nested loops](http://www.result.pk)

**[6. Arrays](http://www.result.pk)**

[i. One and two – dimensional arrays](http://www.result.pk)

[ii. Reading, writing and manipulation of arrays](http://www.result.pk)

**[7. Sub-Program and File Handling](http://www.result.pk)**

[i. Functions:](http://www.result.pk)

* + [Built-in functions (ABS, INT, RND, SQR, LOG, EXP, SIN, COS, TAN, CINT, INT, SGN, FIX, HEX$, LEFT$, MID$, CHR$, STR$, TIME$, INKEY$, SPACE$) and user defined functions](http://www.result.pk)

[ii. Subroutines](http://www.result.pk)

[iii. Reading and writing into files](http://www.result.pk)

**[8. Graphics](http://www.result.pk)**

[i. Sketching and drawing of graphics using utilities such as DRAW and COLOR](http://www.result.pk)

[ii. Generating lines, rectangles, circles etc](http://www.result.pk)

**[LIST OF PRACTICALS](http://www.result.pk)**

1. [Familiarization of DOS commands (external commands) as given in chapter 7.](http://www.result.pk)
2. [Familiarization of DOS commands (internal commands) as given in chapter 7.](http://www.result.pk)
3. [Demonstration of the installation of WINDOWS.](http://www.result.pk)
4. [Demonstration of computer components: (cards, motherboards, buses, connectors, serial ports and other important ICs).](http://www.result.pk)
5. [Familiarization with WINDOWS (all the WINDOWS icons) including shutdown process.](http://www.result.pk)
6. [Use of the mouse.](http://www.result.pk)
7. [Opening, creating, saving, deleting and printing files in MS-WORD.](http://www.result.pk)
8. [Editing MS-WORD documents.](http://www.result.pk)
9. [Writing a program to demonstrate simple arithmetic operations (e.g. calculation of the area of a triangle, volume of a cylinder and speed of an object, conversion of temperature from °C to °F and vice-versa).](http://www.result.pk)
10. [Writing a program to demonstrate the use of formatted input/output statements, (calculation of class grades for different students, selection of the largest number out of given 10 numbers without using a list).](http://www.result.pk)
11. [Writing a program that uses iteration statements (write a program that reads 5 values from user and find the mean value and compare the mean value against an actual value of 9.8 meters/sec](http://www.result.pk)[2](http://www.result.pk)[).](http://www.result.pk)
12. [Writing a program that reads 10 values into an array and after doing some arithmetic operations, prints the desired results.](http://www.result.pk)
13. [Repeating Experiment No.3 using a sub-routine, named average and call this sub-routine in the main program.](http://www.result.pk)
14. [Drawing a line, a circle and a rectangle using system defined built-in functions for graphics.](http://www.result.pk)

**[RECOMMENDED REFERENCE BOOKS FOR CLASS X](http://www.result.pk)**

 [The question papers will be syllabus oriented. However, the following books are recommended for reference and supplementary reading:](http://www.result.pk)

 [1. Computer Science](http://www.result.pk)

 [National Book Foundation, Islamabad.](http://www.result.pk)

 [2. Computer Science](http://www.result.pk)

 [Punjab Text Book Board, Lahore.](http://www.result.pk)

 [3. Computer Science](http://www.result.pk)

 [NWFP Textbook Board, Peshawar.](http://www.result.pk)

 [4. Computer Science](http://www.result.pk)

 [Baluchistan Textbook Board, Quetta.](http://www.result.pk)

 [5. A Textbook of Computer Science for class IX-X,](http://www.result.pk)

 [Prof. Shaukat Ayub Burki,](http://www.result.pk)

 [Gaba Educational Book,](http://www.result.pk)

 [Urdu Bazaar, M.A. Jinnah Road, Karachi](http://www.result.pk)

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| [LOGO](http://www.result.pk) |  |
| [Federal Board SSC Examination](http://www.result.pk) [Computer Science Practical](http://www.result.pk) [Model Question Paper](http://www.result.pk)  |  |

[Time allowed: 2 hours Total Marks: 40](http://www.result.pk)

**[Note:](http://www.result.pk)** [Attempt all Sections.](http://www.result.pk)

**[SECTION – A (Marks: 10)](http://www.result.pk)**

[Q.1 Write down the syntax and example of the following DOS commands. Attempt one from each part:](http://www.result.pk) **[(2+2)](http://www.result.pk)**

 [a. i. DIR ii. DATE iii. VER](http://www.result.pk)

 [b. i. XCOPY ii. FC iii. COMP](http://www.result.pk)

[Q.2 Perform and write down the steps of following MS-Windows tasks (any three):](http://www.result.pk) **[(2+2+2)](http://www.result.pk)**

 [i. How would you change the speed of mouse pointer? (2)](http://www.result.pk)

 [ii. How would you view system properties of your computer? (2)](http://www.result.pk)

 [iii. How would you restore the file from recycle bin? (2)](http://www.result.pk)

 [iv. How would you arrange icons on desktop by name? (2)](http://www.result.pk)

 [v. How would you rename a folder? (2)](http://www.result.pk)

 [vi. How would you hide/unhide the taskbar? (2)](http://www.result.pk)

**[SECTION – B (Marks: 10)](http://www.result.pk)**

[Q.3 Type the following paragraph:](http://www.result.pk)

 [System Software](http://www.result.pk)

[System software includes the programs which control the operation of the computer system. They direct the fundamental operations of the computer system like; displaying information on the screen, storing data on disk, sending data to the printer, interpreting the typed commands and communicate with peripheral devices.](http://www.result.pk)

 [Page 1 of 2 Turn Over](http://www.result.pk)

 [Note: Attempt any five parts:](http://www.result.pk)

[i. Center align the heading and underline it.](http://www.result.pk)

[ii. Use drop caps.](http://www.result.pk)

[iii. Use justified alignment.](http://www.result.pk)

[iv. Apply bold and italic to word “System Software”.](http://www.result.pk)

[v. Add header.](http://www.result.pk)

[vi. Adjust the paragraph line spacing to 1.5.](http://www.result.pk)

[vii. Change the orientation of the page as landscape.](http://www.result.pk)

[viii. Insert page number.](http://www.result.pk)

**[SECTION – C (Marks: 10)](http://www.result.pk)**

**[Not:](http://www.result.pk)** [Attempt any two questions.](http://www.result.pk)

[Q.4 Write a GWBASIC program to find the product of two numbers.](http://www.result.pk) **[(5)](http://www.result.pk)**

[Q.5 Write a GWBASIC program to print the table of any number.](http://www.result.pk) **[(5)](http://www.result.pk)**

[Q.6 Write a GWBASIC program that inputs a number and prints “even” if it is even or “odd” if it is odd.](http://www.result.pk) **[(5)](http://www.result.pk)**

[Q.7 Draw a rectangle in graphics mode in GW Basic.](http://www.result.pk) **[(5)](http://www.result.pk)**

[Viva Voce](http://www.result.pk) **[(5)](http://www.result.pk)**

[Note Book](http://www.result.pk) **[(5)](http://www.result.pk)**

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