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Class: 7
Subject: Computer
1st term Syllabus:
Chapter 1- Computer Software and Language.
Chapter 2- Formulae and Functions in MS Excel.
Chapter 3- More about Excel.

Notes on Chapter 1, Chapter 2 and Chapter 3.

Chapter 1- Computer Software and Languages

EXERCISE

A. Tick the correct option: (answers)

1. Which of the following is not part of a computer?
   c) Credit card

2. Which of the following computer languages is closest to human language?
   b) High Level Language

3. Binary number system is the form of
   c) Machine Language

4. Which of the following is not an example of a general purpose software?
   b) DBMS

5. Which of the following components is/ are controlled by the Device drivers?
   d) All of them

B. Fill in the blanks:

1. A collection of computer programs is called a <u>software</u>, which contains instructions for the computer.
2. <u>High Level</u> languages will enable the computer to solve the programs without the user in future.
3. Microsoft Excel, Lotus 1-2-3, and Calc are examples of <u>application</u> software.
4. Softwares which are especially designed for a specific purpose are called <u>customized software.</u>
5. Language in the form of 0s and 1s is called <u>Machine Language</u>.

C. Write true or false:

1. Hardware and software work independently in a computer.   False
2. Binary language is a low level language.   True
3. Artificial intelligence languages are still being developed. True
4. Database Management System Softwares are used to compare, calculate, and display data. True
5. Low level languages are computer specific. True

D. Answer the following questions:

1. Explain how computers have become an integral part of our lives.
   Computers have become an integral part of our lives because it is used on a large scale in our daily lives in schools, colleges, shops, banks, hospitals and even our homes. They make our work faster and easier.

2. What is the difference between Low Level and high Level Languages?
   Low Level Languages are designed for a particular architecture and are computer specific. Whereas High Level Language was developed witnessing the need of languages which are not computer specific.

3. Write a note on the 4th Generation Languages.
   4th Generation Languages are used to develop software and are very complex programming languages. Some famous 4GLs are FoxPro, Strata, Oracle and Visual Basic (VB).

4. What is Artificial Intelligence?
   Artificial Intelligence relates to the languages that are being developed and programmed in order to make the computer solve a mentioned problem without a programmer. Robots are an example of systems running with Artificial Intelligence.

5. List all the types of Computer Software.
   On the basis of usage, Computer Software can be divided into Application Software and System Software.
   Application Software includes: (i) Generalized Software and (ii) Customized Software.
   System Software includes: (i) Operating System (ii) Device Drivers (iii) Utility programs and (iv) Translators.

6. What is binary number system? How is it important in the functioning of a computer?
Binary number system is a type of number system that consists of only two digits 0 and 1. The base of the number system is 2.
It is important in the functioning of a computer because instructions are given in the form of 0s and 1s and are understood very fast by computers and require no translations.

E. Match the columns: (answers)

1. Binary language -   c) LLL
2. Operating System -   d) Windows
3. DBMS Software-   a) Oracle
4. FORTRAN-   e) HLL
5. Artificial Intelligence- b) Prolog

F. Write the full forms of the following:

1. DBMS – Database Management System.
2. COBOL – Common Business oriented Language.
3. VB – Visual Basic.
4. CPU – Central Processing Unit.
5. CAD – Computer Aided-Design.
6. FORTRAN – Formula Translation.

Chapter 2- Formulae and Functions in MS Excel 2013

EXCERCISE
A Tick the correct option: (answers)

1) Which of the following is a type of cell address?
   d) All of them

2) Which of the following   option is used to select a range of data automatically?
   d) Autosum

3) Which shortcut in excel is used to generate the sum of all the numbers in a range of cells?
   a) Autosum

4) Which of the following is not a mathematical function in Excel?
   d) Integral

5) MS-Excel is a type of _____ software.
   c) Spreadsheet

B. Fill in the blanks:

1. The intersection of rows and columns is called a <u>cell address.</u>
2. Each cell has a <u>cell</u> address.
3. Generally, there are <u>three</u> kinds of cell addresses.
4. Predefined formulae in Excel are known as <u>functions.</u>
5. <u>Autosum</u> function is used to calculate the number of cells containing numbers and not characters.

C. Write True or False:

1. For different functions, the function arguments are different. True
2. Excel is a form of graphic software. False
3. There can be several cells with the same address. False
4. Excel uses formulae and functions to do calculations.   False
5. Statistical functions include sum, product, average, etc.   False

D. Answer the following questions:

1. What is relative cell address?
   Relative cell address is one where the column label and row number are simply written side by side for a cell address.

2. What is a cell?
   The intersection of the rows and columns, which are joined together is called a cell.

3. What kind of calculations can be performed using MS-Excel?
   Mathematical and Statistical calculations can be performed using MS-Excel.

4. List down all the Mathematical and Statistical functions offered by MS-Excel?
   Mathematical Functions include Sum, Product, Quotient, Power, Sqrt, MOD, Aggregate, Subtotal. Statistical functions include Average, Count, Max, Min, Count etc.

5. What is the Autosum feature in Excel?
   Autosum is a feature in MS Excel and other spreadsheet programs that automatically enters the appropriate formula for the commonly used functions of Sum, Average count, Max, Min.

6. What is a function argument?
   The pre-defined formulae known as Functions in Excel and the data entered while using a function is known as function arguement.

7. Differentiate between Max and Min.
Max function is used to find the maximum value of a specific range. Whereas Min function is used to find the minimum value of a specific range.

E. Match the columns: (answers)

1. Mathematical function –   b) Product
2. Statistical function –   d) MIN
3. Mixed Cell address –   e) $A2
4. Spreadsheet software –   c) MS-Excel
5. Absolute cell address –   a) D4

CHAPTER 3. MORE ABOUT EXCEL

EXCERCISE

A. Tick the correct option (answers)

1. Which of the following part is a feature of MS-Excel?
   d) All of them

2. Which of the following is a type of a chart available in MS-Excel?
   b) Area

3. Separating a given information from a defined set of lists is called?
   b) Filtering

4. What feature in MS-Excel automatically lists down all the filtering options?
   b) Autofilter

5. Where is the conditional formatting option available?
   a) Style group

B. Fill in the blanks:

1. Column, line, pie, bar and area are various types of <u>charts</u> in MS-Excel.
2. MS-Excel can be used to <u>sort</u> lists in both ascending and descending orders.
3. The <u>advance</u> Filter option is used to add more than one criterion.
4. The <u>conditional</u> feature enables the user to apply formatting to only those cells in a worksheet which satisfy a particular condition.
5. A <u>worksheet</u> is an object which separates the things which can pass through it, from the things which cannot pass through it.

C. Write true or false:

1. Filter option is not present under Home tab. True
2. Sorting can be done only in a single field in MS-Excel. False
3. The auto filter feature automatically lists down filtering options. True
4. Arranging lists in ascending or descending orders implies formatting. True
5. It is not possible to generate hard copies of the worksheets in MS-Excel. False

D. Answer the following questions:

1. Write short notes on
 (i) Sorting – Sorting means arranging of data in ascending or descending order for easy analysis.
 (ii) Filtering – Filtering means separating the information as required from the given set of list.
 (iii) Conditional formatting – Conditional formatting is a feature that helps in applying formatting to only those cells in worksheet which satisfy a particular condition.

2. Write down the step by step procedure to filter data. In how many ways can the data be filtered?
   The steps to filter data are as follows:
   (i) Select the list of data to be filtered.
   (ii) Click on the data tab.
   (iii) Click on the Filter option in the Sort & Filter group.
   (iv) Drop down arrows are added in front of the headings of all the selected columns.
   (v) Click on the drop down arrow present on the column heading.
   (vi) According to the required filter in the drop down menu, tick or untick the required filter.
   (vii) A drop down menu opens. Click OK.
   There are three ways in which data can be filtered.

3. What is conditional formatting? How is it useful?
   Conditional formatting is a feature that helps us to apply formatting to only those cells in worksheet which satisfy a particular condition.
   It is useful as it can be used to emphasize or even differentiate among data and information stored in a spreadsheet.

4. Write a short note on charts feature in MS-Excel.
   Graphs or diagrams that interpret data are known as charts in Excel. Charts make the data easy to understand, attractive and presentable. It can also be used to compare and analyze the data values at different points very easily.

5. Write down the procedure to modify charts, and then printing the worksheet.
   We can create a chart for a particular data list by applying the following steps:
   (i) Select the entire list required.
   (ii) Click on the insert tab.
   (iii) Under the chart group, click on any of the arrows to open options for various types available in that category.

The procedure to print the worksheet is as follows:
(i) Click on File tab.
(ii) Click on Print option.
(iii) Click on the required option to set the number of printouts needed.
(iv) Click on Print button.

E. Which of the tabs should be clicked to do the following?

1. Sorting a column – Data tab
2. Getting the advanced filter option – Data tab
3. Performing conditional formatting – Home tab
4. Printing a worksheet – Home tab
5. Changing the chart type – Insert tab

F. One word answers

1. Comparison of large sets of data is called? Chart group.
2. Arranging the data of a column in ascending order implies? Sorting.
3. Presentation of data in pictorial form is done with the help of? Chart.
4. What feature automatically lists down the filtering options? Filter.