DON BOSCO SCHOOL, RANCHI
COMPUTER SCIENCE
CLASS – 7

Chapter 1 : Computer – Hardware Components

A. Fill in the blanks:-
1. The physical components of a Computer which we can touch and feel are known as _____.
   Ans : Hardware
2. A motherboard is also known as _____.
   Ans : Main Board
3. A sound card is also known as _____.
   Ans : Audio Card
4. The main secondary storage device inside the CPU is called _____.
   Ans : Auxiliary Memory

B. State T for true statement and F for false statement: -
1. A video card is an expansion card.
   Ans : True
2. Projector displays video, images on a smaller screen.
   Ans : False
3. Digital camera is used to take photographs.
   Ans : True
4. Parallel port sends multiple bits of data at one time.
   Ans : True
5. USB stands for Universal Sequential Bus.
   Ans : False

C. Multiple Choice Questions
1. _____ printer forms letters and images on the paper.
   a. Laser
   b. Inkjet
   c. Dot Matrix
   Ans : b. Inkjet
2. _____ sends voice signals to a computer.
   a. Microphone
   b. Phone
   c. Printer
   Ans : a. Microphone
3. _____ drive is also known as pen drive.
   a. Ports
   b. Flash
   c. Blu-ray
   Ans : b. Flash

D. **Answers the following Questions: -**

1. **What is a Computer? What are its different parts?**

   Ans : A Computer is electronic devices, which accept input from the user, and after processing gives us output as result. It is used for the calculation and solve all the mathematical and logical problems.

   A Computer has the following parts:

   a) Input device
   b) Processing device
   c) Output device
   d) Memory device

2. **Explain the types of printers.**

   Ans : Printer is an output device used for output on the paper. There are mainly three types of printers:

   a) **Dot Matrix Printer** : This printer contains movable print head with ins that strike the ribbon placing a dot on the paper with hundreds of dots forming images or text.
   b) **Inkjet Printer** : This printer forms letters and images on the paper by spraying small streams of quick drying ink.
   c) **Laser Printer** : This printer uses laser technology to print images on the paper.

3. **What is modem?**

   Ans : Modem stands for Modulator or Demodulator. It is mainly used to connect communication line with the computer system for data transfer. The function of this device is to convert digital signals to analog and vice-versa. The process of converting digital signal to analog signals is called modulation while from analog to digital signals is called demodulation.

4. **What is motherboard? What does it contain?**

   Ans : A motherboard is one of the essential components of computer system which provides connectivity to various parts of the computer system so that they can communicate with each other. Motherboard contain the interface to connect devices like keyboard, mouse, hard drive and sockets to connect printer, usb etc.

5. **Write short note on SMPS.**

   Ans : SMPS stands for Switched Mode Power Supply. SMPS is an electronic ower supply which transfers electric power from a source AC mains to a low voltage device DC for the Computer. It ensures that proper power supply is available for the working of computer system before switching it on.

6. **Explain the two types of mouse.**

   Ans : Following are the two types of mouse :

   a) **Optical Mouse** : It uses optical sensors which uses laser technology to track the movement of mouse pointer. It respond more quickly and precisely than the mechanical mouse.

b) **<u>Wireless Mouse</u>** : These mouse are popular now a days because it provide connectivity without wire or cable. The transmitter in mouse sends electro-magnetic signals for the computer to detect its movement and clicks.

7. **Name the types of port.**

   Ans : The external peripheral devices like keyboard, mouse, monitor, speaker, modem, pen drive etc. connected with the main board of the computer system through special interface called Ports. Different types of ports are as follows:

   a) Serial Port
   b) Parallel Port
   c) PS/2 Port
   d) USB Port
   e) VGA Port
   f) HDMI Port

Chapter 2 : Number System – An Introduction

A. Fill in the blanks : -

1. The most common number system is a _____ number system.
   Ans : Decimal Number system
2. The base of binary number system is _____.
   Ans : 2
3. The base of octal number system is _____.
   Ans : 8
4. Hexadecimal number system consists of _____ digits.
   Ans : 16
5. In binary addition, 1 + 0 equals to _____.
   Ans : 1

B. Write T for true statement and F for false statement: -

1. The decimal number system consists of 10 digits.
   Ans : True
2. 1 multiplied by 0 is equal to 0.
   Ans : True
3. The hexadecimal number system has the base 16.
   Ans : True
4. A binary number system can have only two digits, 0 and 1.
   Ans : True

C. Multiple Choice Questions: -

1. **In binary multiplication, 1 x 1 equals to _____.**
   a. 2
   b. 8
   c. 1
   Ans : c. 1
2. **To convert decimal number into binary number, divide the number by _____**
   a. 2
   b. 8
   c. 10
   Ans : a. 2
3. **Which of these is not a hexadecimal number?**
   a. ABGH
   b. CD23
   c. 12AB
   Ans : a. ABGH
4. **Which of these is not a octal number system?**
   a. 345
   b. 241
   c. 249
   Ans : c. 249

D. **Answer the following questions: -**

1. **What does bit stands for?**

   Ans : Bit stands for binary digit. A digit in binary number system is called a bit. Binary number system uses only two digits, 0 and 1. Binary number system is used widely in computers.

2. **Briefly the octal number system.**

   Ans : Octal number system has eight digits from 0 to 7 with the base 8. This is also a positional value system where in each digit has its own vale expressed to the power of 8. For example, $(2416)_8$.

3. **What do you understand by hexadecimal number system?**

   Ans : Hexadecimal number system has 16 digits 0 to 9 and A, B, C, D, E, F where A represents 10, B represents 11 and so on. This is also a positional number system where is each hexadecimal digit has its own value expressed to the power of 16. For example, $(3B)_{16}$.

4. **State the use of Number system.**

   Ans : Number System is a set of values used to represent different quantities. In our daily counting use we are using decimal number system, which has a base of 10 as it uses 10 digits (0-9). The digital computer represents all kind of data and information in binary numbers which have a base of 2 as the computer uses 2 digits (0 and 1).

   Number System are as follows:
   a) Decimal Number System
   b) Binary Number System
   c) Octal Number System
   d) Hexadecimal Number System

Chapter 5: Spreadsheets – An Introduction

A. Fill in the blanks: -

1. An Excel worksheet consists of _____ rows.
   Ans : 1,048,576 rows
2. _____ key moves one cell downward.
   Ans : Down Arrow Key
3. A workbook contains _____ worksheets by default.
   Ans : 3 (Three)
4. The Excel file is saved with the extension _____.
   Ans : .xlsx

B. Write T for the true statement and F for false statement: -

1. Formulae are made up of numbers only.
   Ans : False
2. Workbook is a collection of worksheets.
   Ans : True
3. Every formula in Excel must begin with an equal (=) sign.
   Ans : True

C. Answer the following questions: -

1. **What are spreadsheets? What are its uses?**
   Ans : A spreadsheet is defined as a large sheet which contains data and information, arranged in rows and columns. It is also known as worksheet. It is a very easy way to organize data in rows and columns. This allows data to be analysed and interpreted easily. Spreadsheet are useful in business, engineers and scientist for performing complex calculations.

2. **Write down the features of Microsoft Excel.**
   Ans : Features of MS-Excel
   a) AutoComplete
   b) AutoCorrect
   c) Check Spelling
   d) Creating Charts
   e) Worksheet Linking
   f) What-if Analysis
   g) Applying Formulae

3. **How many types of data can be entered in a worksheet? Explain each type briefly.**
   Ans : There are three types of data values that can be entered in the Excel worksheet. These are as follows:
   a) **Text** : This type of data consists of alphabets, numbers and other symbols.
   b) **Number** : These are numeric entries that can be used in any formula or calculation.
   c) **Formula** : Formulae are equations that perform calculations on values in the worksheet. A formula should always start with an equal sign (=).

4. **Write the steps to save a workbook.**
   Ans : <u>To save a workbook, following steps should be followed:</u>
   Step-1 : Click the File tab.
   Step-2 : Click the Save option.
   Step-3 : Type the file name in the File name box.
   Step-4 : Click the Save button.

5. **Explain how to remove a worksheet.**
   Ans : To remove the unwanted worksheet from the workbook, following steps should be followed:
   Step-1 : Select the sheet to be deleted.
   Step-2 : Click Delete from the Cells group of the Home tab and select Delete Sheet option.

6. **What are relational and logical operators used for?**
   Ans : <u>Relational Operators</u> : Relational operators are used to compare two values. They form relational expressions. These operators always give a single value as result: True or False.
   <u>Logical Operators</u> : Logical operators are used to compare two or more relational expressions. These operators also give a single value as result: True or False.

Chapter 6: More On Spreadsheet

A. **Multiple Choice Questions: -**
   1. **Microsoft Excel is made up of _____ and _____.**
      a) Rows, columns
      b) Tables, data
      c) None of these
      Ans : a) Rows, columns
   2. **A cursor in Excel is called the _____**
      a) Cell pointer
      b) Shape
      c) Cell
      Ans : a) Cell Pointer
   3. **The Undo/Redo command is present in _____ toolbar.**
      a) Quick access
      b) Menu
      c) Taskbar
      Ans : a) Quick access

B. **Fill in the blanks: -**
   1. _____ option is used to reverse the previous action.
      Ans : Undo
   2. _____ feature is used to enter predefined series of data.
      Ans : Auto Fill
   3. You can copy the contents of a cell to other cells by using _____ and _____ commands.
      Ans : Copy and Paste

C. **Write T for true statement and F for false statement: -**
   1. Copy, Cut and Paste commands are present in the Font group.
      Ans : False
   2. To insert a cell, click Insert from the Cells group.
      Ans : False
   3. To remove contents of cell, select it and press Esc key.
      Ans : False

D. **Answer the following questions: -**
   1. **What is the function of Undo and Redo commands?**
      Ans : Undo Command : Undo Command is used to cancel or reverse the previous actions or last actions.
      Redo Command : Redo Command is used to repeat the last actions or reverse the undo actions.

2. **What is Autofill? How do you create a numeric data series?**

   Ans : The Auto Fill feature is used to enter a predefined series of data such as text or numbers in a worksheet quickly. We need to specify the first two values of the series in order to determine the increment value of the series.

   For example : 1, 2, 3, 4, ……………………

   Mon, Tue, Wed, …………………………. etc.

3. **Explain how to insert a row/column in Excel.**

   Ans : Please Refer to Page no. 62 and write down all the steps.

4. **Explain how to delete a cell in Excel.**

   Ans : Please Refer to Page no. 64 and 65 and write down all the steps.

5. **Explain briefly how to move a cell content.**

   Ans : Please Refer to Page no. 63 and 64 and write down all the steps.

6. **Write the steps to adjust row height in Excel.**

   Ans : Please Refer to Page no. 66 and write down all the steps.