CHAPTER – 1

COMPUTER SYSTEM

A. Fill in the blanks with the correct words.
1. Application Software
2. Six

B. Write T for the true statement and F for the false one.
1. False
2. True

C. Choose the correct option
1. speaker
2. 678
3. 8
4. Leftmost

D. Descriptive type answers

Answer the following

1.

HARDWARE	SOFTWARE
It comprises the physical components that make up a computer system.	Software is a set of instruction that tells a computer exactly what to do.
You can touch and feel the hardware	You cannot touch and feel the software.
Example Input Device – Mouse Output Device – Speaker Storage Device – CD	Example System Software – Device Driver Application Software – Payroll System.

2. The two types of software are:
   i. System Software - Ex: Operating System, Device Drivers and Language Processors.
   ii. Application Software – Ex: Payroll System, Inventory System and Accounting System.

3. The various storage units are

- Bit – It is the smallest data unit in a computer.
- Byte – A combination of 8 bits forms one byte.
- Nibble – A nibble is a group of 4 bits.
- Word – A group of bits representing data or instructions that forms the basic information unit of the computer.

4.

Decimal Number System	10	0, 1, 2, 3, 4, 5, 6, 7, 8, 9
Binary Number System	2	0, 1
Octal Number System	8	0, 1, 2, 3, 4, 5, 6, 7
Hexadecimal Number System	16	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F

5. The steps to do this conversion from binary number to its equivalent decimal number   are:
   - Find the positional value of each digit.
   - Multiply the digit with the positional value.
   - Sum up the product calculated in step 2.
   - The total is the equivalent value in the decimal number system.

6. LSD – LSD stands for Least Significant Digit(LSD). The rightmost digit has the least positional value(weight), therefore it is called the least significant digit.

MSD - MSD stands for Most Significant Digit(LSD). The leftmost digit has the maximum positional value(weight), therefore it is called the most significant digit.

Application-Based Questions

a. The positional values are:

   i. 8^1 ii. 10^2 iii. 16^0

b.
   i.   The smallest number is 1011001_2 and its decimal value is 89_{10}.
   ii.   The largest number is 1111011_2 and its decimal value is 123_{10}.

c. The next number is 1000001_2 and its decimal value is 65_{10}

d. The correct values are:

   i.   1 KB = 2^{10} bytes
   ii.   1 MB = 2^{20} bytes
   iii. 1 GB = 2^{30} bytes
   iv.   1 TB = 2^{40} bytes

WORKSHEET 1

A. Fill in the blanks

1. Bit
2. One
3. Nibble
4. Binary digits or bits
5. 2^{10}
6. Word size or word length

B. Form the correct word from the below jumbled letters:

1. Word size
2. Software
3. Hexadecimal
4. Megabyte

WORKSHEET 2

1. Convert the following decimal to binary number system

   a) $95_{10} = (1011111)_2$
   b) $536.28_{10} = (1000011000.010)_2$

2. Convert the following Binary to decimal number system

   a) $101_2 = 5_{10}$
   b) $1001.01_2 = 9.5_{10}$

CHAPTER – 2
FORMULAS AND FUNCTIONS IN EXCEL 2013

A. Fill in the blanks with the correct words.
1. Functions
2. =(equal)

B. Write T for the true statement and F for the false one.
1. True
2. True

C. Choose the correct option
1. &
2. #NUM!

D. Descriptive type answers

1. There are 3 types of cells referencing,
   a. Relative cells referencing
   b. Absolute cells referencing
   c. Mixed cells referencing

Relative cell referencing: In relative cell referencing, the row and the column references can change when you copy the formula to another cell.
It is the default cell referencing.
   Example: A4, G5

Absolute cell referencing: In Absolute cell referencing, the row and the column references do not change when you copy the formula, because the reference is to a fixed cell address.
The $ sign used for Absolute referencing.
   Example: $A$4, $G$5

Mixed cell referencing: In mixed referencing if the row reference is relative, the column reference will be absolute and vice versa.
   Example: $A4 * A$5

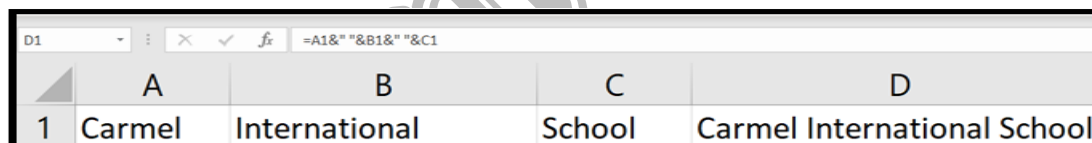2. The cell in column B and row 2 is referred as B2

3. The process of joining text values is called concatenation.
The ampersand (&) symbol used to concatenate strings.
   Ex: A1 = Carmel, B1= International, C1= School.
If you type in D1 cell = A1& " " &B1& " " &C1 and Press Enter
Result: Carmel International School.

D1	▾ : × ✓ fx	=A1&" "&B1&" "&C1		
	A	**B**	**C**	**D**
1	Carmel	International	School	Carmel International School

4. The error '#####' in Excel occurs when the column is not wide enough to display the value.

5. The Insert Function command in Excel 2013 is known as Function Wizard in Excel 2007. This command helps you insert a formula by selecting the required function and the cells you want to reference, in the relevant dialog boxes. Follow these steps to use this command.
- Click the cell in which you want to enter a formula.
- Click the Insert Function option on the Formula bar.
- The Insert Function dialog box appears. In the Or select a category box, select All. If you are familiar with the function categories, you can select a category.
- In the select a function box, select the function you want and then click Ok.
- In the argument dialog boxes that appear, enter the values, or cell references, or select the cells that you want to reference.
- Click Ok on the dialog box.

Application-Based Questions

a. (i) D: D   (ii)S : X

b. He can press the Enter button near the formula bar to finish entering the formula.

c. (i) As every formula in Excel starts with an 'equal to')=) sign, Mudit should have done the same. He should now type the formula as ='B1+B2+B3'.

(ii) If value in any of the cells B1,B2 or B3 changes, the value in the cell B4 will also change.

d.(i) Formula in cell C2 will be =$B$1*A2

  Formula in cell C2 will be =$B$1*A3

  Formula in cell C2 will be =$B$1*A4

(ii) The Formula =$B$1*A1 specifies mixed cell referencing

WORKSHEET 1

a. Who am I?

1. =
2. Formula
3. Reference
4. Ready
5. Insert Function

b. Form the correct word from the below jumbled letters:

1. Pointing
2. Circular
3. Functions
4. Auto sum
5. Relative
6.

c. Word Search

1. Pointing
2. Absolute
3. Relative
4. Mixed
5. Formula

d. =A1&" " &B1

e. =A1&" " &B1&" "&C1