Assignment 1 (ITP203-Theory)

1) Perform the 2's complement on Binary Number (**01110**) and note down the result. **[1 Mark]**

2) Perform the 1's complement on **(10001).** **[1 Mark]**

3) You have A = **11010** and B = **101**. Divide A by B and find the **Quotient** and **Reminder**. **[1 Mark]**

4) Convert $\mathbf{(75)_{10}}$ into Hexadecimal representation? **[1 Mark]**

5) $\mathbf{(776)_8 + (010110111)_2 = (\ ?\ )_8}$. **[1 Mark]**

6) $\mathbf{(10221102.102)_3 = (\ ?\ )_9}$. **[1 Mark]**

7) WAP in C using **While-Loop/Do-While Loop** to find a Fibonacci series of "N" number of terms.
Example:- If N=8, then the Fibonacci Series = 0, 1, 1, 2, 3, 5, 8, 13. **[2 Mark]**

8) WAP in C using **While-Loop/Do-While Loop** to find if a number (any digit) is Armstrong Number.
Syntax:- abc = $a^n + b^n + c^n$ (Example of 3 digit number)
Example:- 153 = 1*1*1 + 5*5*5 + 3*3*3 **[2 Mark]**

Note

*a) Individual student is advised to do a self-research/study on **Fibonacci Number Series** and **Armstrong Numbers**.*

*b) This Assignment 1 (10 Mark) will be converted into **5%** weighting of CA.*

*c) **Submission Dateline: 4th October 2020, 11:00 pm***

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