Tutorial 2

**Thapar Institute of Engineering and Technology Patiala**

**Computer Science and Engineering Department (CSED)**

1. Write down a R.E. over {0, 1} such that no. of 1’s are divisible by 4.
2. Write down a regular expression for language L over {a, b, c} such that every string in L contains a substring ccc.
3. Write down a R.E. for the language L={w: | w | mod 5=0}, }
4. Write down a R.E. over alphabet containing at least one *a* and at least one *b*.
5. Write the Regular expression for the language of all even length strings defined over 
6. Write the Regular expression for the language of all even length strings defined over 
7. Write the Regular expression for the language over 
8. Write the Regular expression for the language over 
9. Write down a R.E. over {0, 1} whose fifth symbol from the right end is1.

9. Design the DFA for the problem given in Q1-8.