

ASSIGNMENT QUESTIONS (IMP\*)

UNIT - I	
1.	<b>Explain</b> transition diagram, transition table with example.
2.	<b>Define</b> transition function of DFA.
3.	<b>Define</b> $\epsilon$ -transitions.
4.	<b>Construct</b> a DFA to accept even number of 0's.
5.	<b>Define</b> Kleen closure.
6.	<b>Construct</b> a DFA to accept empty language.
7.	<b>Explain</b> power of an alphabet?
8.	<b>Write</b> transition diagram for DFA accepting string ending with 00.
9.	<b>Write</b> transition diagram for DFA to accept exactly one a.
10.	<b>Define</b> the language of NFA.
11.	<b>Define</b> language over an alphabet with examples. Write a DFA to accept set of all strings ending with 010.
12.	<b>Give</b> example for Minimize the DFA .
13.	<b>Construct</b> a Moore machine to accept the following language. $L = \{ w \mid w \bmod 3 = 0 \}$ on $\Sigma = \{ 0,1,2 \}$
14.	<b>Write</b> any four differences between DFA and NFA
15.	<b>Convert</b> NFA with $\epsilon$ to NFA with an example.
16.	<b>Construct</b> NFA for $(0 + 1)^*(00 + 11)(0 + 1)^*$ and Convert to DFA.
17.	<b>Construct</b> NFA for $(0 + 1)^*(00 + 11)(0 + 1)^*$ and Draw the transition table and transition diagram and example strings.
18.	<b>Illustrate</b> given 2 FA's are equivalent or not with an example.
19.	<b>Construct</b> Mealy machine for $(0 + 1)^*(00 + 11)$ and convert to Moore machine.
20.	<b>Convert</b> Moore machine to Mealy machine with an example.