

Automata Theory and Computability - 15CS54

Module-2: Assignment Questions

Sl. No.	Questions	Marks
Regular Expression		
1.	Define regular expression.	5
2.	<p>Let L be the language accepted by the following finite state machine: Indicate, for each of the following regular expressions, whether it correctly describes L:</p> <ol style="list-style-type: none"> $(a \cup ba)bb^*a$. $(\epsilon \cup b)a(bb^*a)^*$. $ba \cup ab^*a$. $(a \cup ba)(bb^*a)^*$. 	4
3.	<p>Convert following RE's into FSM's</p> <ol style="list-style-type: none"> $(ab^*)^*$ $(a \cup b)^*$ $a^* \cup b^*$ $(a \cup b)ab$ 	
4.	<p>Convert following FSM's and RE's</p>	
5.	Briefly explain the applications of regular expression.	