

## Automata Theory and Computability - 15CS54

### Module-4: Assignment

Sl. No.	Questions
1	Briefly explain Turing Machine model. Give its definition.
2	Design TM that accepts $\{0^n1^n \mid n \geq 1\}$ . Obtain the computation for 0011 and 010.
3	Design TM that accepts $\{1^n2^n3^n \mid n \geq 1\}$ . Write the ID's for 1223, 1123, 1233 and 112233.
4	Design a TM which can multiply two positive integers using a subroutine. Write the ID's for integers.
5	Construct a Turing machine that can accept the set of all even palindromes over $\{0, 1\}$ .