Assignment 4 (Unit 4)

Q1.	**Define** a Turing Machine. With a neat diagram explain the working of a Turing Machine. **Write** the Turing Machine model.
Q2.	**Define** multi head Turing Machine, multi-dimensional Turing Machine. **Explain** the moves in Turing Machine
Q3.	**Define** an ID of a Turing Machine?
Q4.	**Define** the Language of Turing Machine.
Q5.	**List** types of TM.
Q6.	**Write** the difference between Pushdown Automata and Turing Machine.
Q7.	**Define** Context sensitive language.
Q8	**Construct** a Turing Machine to accept the following language.L = { $0^n1^n0^n \mid n \geq 1$}
Q9	**Write** short notes on Recursive and Recursively Enumerable languages?
Q10	**Explain** Church's Hypothesis.