

SHORT ANSWER QUESTIONS

1. Define PDA?
2. What is a Turing machine?
3. Differentiate PDA and TM.
4. What is meant by linear bounded automata?
5. Define P and NP Problems?
6. Differentiate Deterministic PDA and Non- Deterministic PDA.
7. What is the language accepted by TM?
8. Define NP Hard?
9. Define LR (0) Grammar?
10. List the properties of Recursive and Recursively Enumerable Languages.
11. What is meant by linear bounded automata?

LONG ANSWER QUESTIONS

1. Explain the CNF with an example.3M
2. a) Define Turing Machine. Explain its model with a neat diagram.
b) Design a Turing machine which accepts the following languages
i) $L = \{a^n b^n \mid n \geq 1\}$.
3. Write short notes on Chomsky Hierarchy
4. Discuss in details about the Church's Hypothesis
5. Explain the following
a) Decidability b) Post Correspondence Problem c) Turing Reducibility
6. Explain the GNF with an example.3M
7. Explain the following
i) Multi tape Turing Machines ii) Restricted Turing Machines
8. Explain in detail the Universal Turing Machine.