## **UNIT-1**

- (a) Explain about Language processing system in detail. [6M][L2] Explain the role of lexical analyzer in compiler construction tool process.[4M][L2]
- 2) Consider the following grammar  $S \to (L)$  |a  $L \to L$ , S |S Construct leftmost and Right most derivations and parse trees for the following sentences: i. (a,(a,a)) ii. (a,((a,a),(a,a))). [10M][L3]
- Demonstrate the role of lexical analyzer .[5M][L2] bWhat is a preprocessor? Explain various functions of a preprocessor. [5M][L1]
- 4)a)Discuss about Recognition of Tokens? [5M][L3] b)Explain about DFA and NFA one example for conversion of NFA to DFA conversion. [5M][L2]
- 5)Explain in detail about the phases of compilers with the following statement position=intial+rate\*60? [10M][L2]
- 6)a)Explain the role of lexical analyzer .[5M][L2] b)Explain in detail about Input buffering. [5M][L2]
- Explain the boot strapping process with suitable examples and diagrams.. [5M][L2] b) Define Transition diagram and represent transition diagram of RELOP operator. [5M][L1]
- 8) Define Regular Expression. Explain the properties of Regular Expressions. Discuss with suitable examples. [10M][L2]
- 9)a) Explain left recursion and left factoring with examples. [6M][L2] b)Define Token,pattern Lexeme. [4M][L1]
- What is LEX? Explain, in detail, different sections of LEX program. [6M][L1] b)Discuss about Ambiguity? [4M][L1]