

## Unit - V

- Q.5. (a) Explain the model of Linear Bounded Automaton 6
- (b) Construct a grammar for Language  
 $L = \{a^n b^n c^n \mid n \geq 1\}$  using context sensitive 6
- (c) Explain the properties of context sensitive language 4
- Or
- Q.5. (a) Explain Chomsky Hierarchy in detail with suitable example 6
- (b) Prove the following :
- (i) If  $L$  is a context - sensitive language, then  $L$  is accepted by a linear bounded Automaton 6
- (ii) If  $L$  is accepted by linear bounded Automaton, the  $L$  is context - sensitive 4
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