

## SEC-1

DATE: / /

PAGE:

② Define parse tree. Find parse tree the string  $abbcde$  considering the production.

$$S \rightarrow aAcBe$$

$$A \rightarrow Ab$$

$$A \rightarrow b$$

$$B \rightarrow d$$

Is this ambiguous? Justify

i) A parse tree is pictorial representation of derivation so it is also known as derivation tree.

ii) Parse tree is the tree representation of deriving a Context free Language from a given CFG

iii) A parse tree is an ordered tree in which left-hand side of a production represents a parent node and children nodes are represented by production

right hand side.

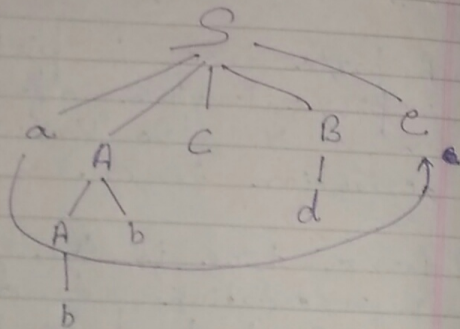
Numerical.  $\therefore$

$$S \rightarrow aAcBe.$$

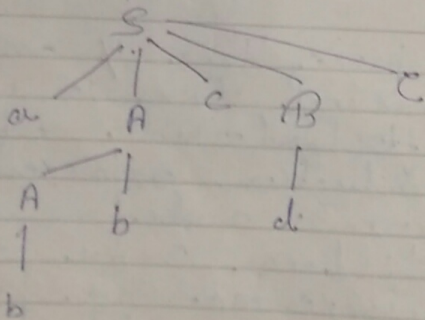
$$A \rightarrow Ab|b$$

$$B \rightarrow d.$$

Parse tree.  $\therefore$



Left most derivation  $\therefore$



Right most derivation  $\therefore$

