5   Formal Models of Language (pjb48)

This question concerns lexical grammars.

(*a*)   Tree Adjoining Grammars contain two types of elementary tree.

    (*i*)   What are these trees called?   [1 mark]

    (*ii*)   If one were building a grammar for English which aspects of language do the two tree types model?   [2 marks]

(*b*)   Provide a Tree Adjoining Grammar that can parse the string: *students enjoy easy exams*   [5 marks]

(*c*)   Show how a parse for this string is constructed. Explain the operations.
                                       [5 marks]

(*d*)   Provide a Categorial Grammar that can parse the same sentence.   [4 marks]

(*e*)   When children learn their first language they usually acquire nouns before verbs before modifiers. They also usually produce single word strings before moving on to longer strings. With reference to Tree Adjoining Grammars and/or Categorial Grammars propose some hypotheses for this. Justify your proposals.
                                       [3 marks]