

## 1993 Paper 9 Question 9

### Natural Language Processing

Write on *four* of the following topics, describing the problems they raise and their significance for natural language processing. [5 marks each]

- (a) *Worst-case* (exponential) syntactic ambiguity
- (b) Semantic interpretation of *embedded* propositions (such as *John thinks the prime minister is a grey man*)
- (c) Focus and anaphoric reference
- (d) Unification as a technique for expressing syntactic rules
- (e) Defeasible reasoning for interpreting utterances
- (f) Natural prosody for speech synthesis from text