

## 2009 Paper 8 Question 10

### Natural Language Processing

(a) Give brief definitions of the following terms. Illustrate the definitions with examples.

(i) hyponymy

(ii) meronymy

(iii) antonymy

[2 marks each]

(b) Describe Yarowsky's (1995) technique for word sense disambiguation and illustrate how it would disambiguate the following two senses of "sake":

Sense 1: *sake, interest* (a reason for wanting something done: "for your sake", "died for the sake of his country")

Sense 2: *sake, saki, rice beer* (Japanese alcoholic beverage made from fermented rice, usually served hot)

[14 marks]