

## 2011 Paper 9 Question 5

### Information Retrieval

Consider the following text, which gives the input to three different information extraction systems dealing with texts about job succession events.

Last Monday Sunny Simmers resigned his position as CEO of Sparkling Inc., the well-known cleaning supply manufacturer, following recent corruption allegations. This move has been expected for some time now. He is succeeded by his brother, Sandy Simmers.

The tasks of the three systems are as follows:

- System 1 determines all person and organisation names.
- System 2 determines the **employed-by** relationship, which holds between employees and employers.
- System 3 fills templates about job successions, in the style of MUC templates (as in the following figure).

START-JOB-EVENT
Person:
Position:
Company:
Start Date:

END-JOB-EVENT
Person:
Position:
Company:
End Date:

- (a) For each system, give a description of how it could plausibly solve its task. What is the most difficult problem each system will encounter? Use examples from the text. [4 marks per system]
- (b) Define each of the following concepts, giving an example in the context of the above text if applicable:
- (i) sure-fire rule; [2 marks]
  - (ii) lexico-semantic template; [2 marks]
  - (iii) inference rule; [2 marks]
  - (iv) template learning. [2 marks]