# ITS 413 – QUIZ 5

First name: \_\_\_\_\_

Last name: \_\_\_\_\_

ID: \_\_\_\_\_

Total Marks: \_\_\_\_\_

out of 10

- Write your name and ID in the space provided at the top of the sheet.
- Answer the questions on this sheet(s) only, using the space given.
- When asked to *describe* or *explain* something, your answer must be clear, concise and unambiguous. Usually about 1 to 4 sentences.

#### Question 1 [4 marks]

List the name of any four of the five main components of a search engine architecture and describe briefly what they do.

#### Question 2 [2 marks]

Describe connectivity-based ranking and content-based ranking, and give an example of a criteria for each.

## Question 3 [1 mark]

Describe a malicious technique that can be used to increase the ranking of a website.

## Question 4 [1 mark]

In comparison to client/server based systems, why is locating resources hard in P2P systems?

## Question 5 [2 marks]

Calculate the PageRank for each page in the figure below, assuming that once the ranker has visited a page once to calculate the rank, it will not visit again. Also assume the PageRank of page 2 has already been counted towards the PageRank of page 1. You can write the PageRank of each page inside the page on the figure.

