

5. What is a search engine? How does a search engine perform searching?
6. Explain the following:-
  - (a) Relevance Ranking
  - (b) Semantic Web
  - (c) Software Agents
  - (d) Web Directories
7. What is the significance of compression? Explain any two text compression methods.
8. Explain social network analysis. How do we model the web?

**Ph.D./Math.Sc./296**

**Ph.D. Course Work  
Examination, 2013-14**

**Mathematical Science**

**Paper : MSPR-17**

**Information Retrieval and Web Mining**

**Time : Three Hours**

**Full Marks :100**

*(Write your Roll No. at the top immediately on the receipt of this question paper)*

**Note:** Attempt any **five** questions. Each question carries **equal** marks.

1. Explain with suitable example Fuzzy information Retrieval and Inverted Index.
2. Describe the taxonomy of information Retrieval models and Bayesian Network.
3. What is IR ? Explain any two classic models in information Retrieval.
4. What do you mean by semantics of a document ? Explain document preprocessing procedure.