Before answering the question paper the candidate should ensure that they have been supplied the correct question paper. Complaints in this regard, if any, shall not be entertained after the examination.

Note: Question No. 1 is Compulsory and attempt any two questions from each section. All questions carry equal marks.

1. (5x4=20)
   (a) Why the fat finger problem occurs in mobile search? Suggest possible solution for it.
   (b) What is information filtering? Why it is used?
   (c) Define metadata and annotations.
   (d) What are the challenges of Automated Visual Indexing?

SECTION A

2(a) Discuss the various models of information retrieval with their benefits. Probabilistic approach is more useful for the information retrieval? Give your comment and Justify your answer. (10)

(b) Explain the user centered evaluation of information retrieval process. (10)

3. How the image can be retrieved? What are the attributes of image which helps in retrieving process? What is image information retrieval? Describe the image information retrieval method. Explain the problems faced during retrieval of any image and what did you suggest for them in the information retrieval. (20)

SECTION B

5(a) What is text categorization and genre in IR? Explain the procedure of development of text categorization system in detail. (10)

(b) Discuss the applications and future scope of text categorization. (10)

6(a) What do you mean by semantic search? Discuss the elements of semantic web? (10)

(b) What is ontology? Explain the design and development process of an ontology. How the ontology development helps in information retrieval? (10)

7(a) Why the natural language processing is more computing intensive? Explain the steps of natural language processing in detail. (10)

(b) Explain the role of natural language processing in the information retrieval. Also discuss the application of Natural language processing in IR. (10)