Paper Code: IT-061

Roll No.

B.Tech.
(SEM VI) EVEN SEMESTER EXAMINATION 2015-16
INFORMATION RETRIEVAL & MANAGEMENT

[Time: 3 hrs.] **[Max. Marks: 100]**

Note- Attempt All questions.

1. Attempt any four part of the following:- **[5x4=20]**

    (a) What do you understand by information retrieval? Explain with the help of IR system block diagram.
    (b) Explain Luhn's ideas regarding text analysis.
    (c) Define the following terms:
        i. Indexing
        ii. Index language
        iii. Document representative
        iv. Automatic indexing
        v. Indexing exhaustivity
    (d) Write a short note on probabilistic indexing.
    (e) What is the use of clustringin IR?
    (f) Explain the working of single pass algorithm with the help of an example.

2. Attempt any two part of the following:- **[10x2=20]**

    (a) Explain index inverted file. How can it be used in information retrieval?
    (b) Discuss various search strategies in detail.
    (c) Explain ring structure. Discuss its advantages and disadvantages.

3. Attempt any four part of the following:- **[5x4=20]**

    (a) What do you mean by performance evaluation of data retrieval system? Explains the terms precision and recall with the help of example.
    (b) What are the advantages and disadvantages of interpolated recall precision? .
    (c) Explain harmonic mean and E-measure.
    (d) Discuss prototypes, projects and interface standards with respect to digital libraries.
    (e) Write a short note on online IR system.
    (f) What is TREC? Explain.

4. Attempt any four part of the following:- **[5x4=20]**

    (a) Define Taxonomy and ontology.
    (b) Write down methodological steps in ontology development.
    (c) Discuss the approaches to build ontology.
    (d) What is MIMD architecture? Discuss the challenges of multitasking.
    (e) How are queries processed in distributed IR?
    (f) Compare parallel and distributed IR.

5. Attempt any two part of the following:- **[10x2=20]**

    (a) Data modeling
    (b) Query database for multimedia document.
    (c) Two dimensional color images.