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INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

COMPUTER SCIENCE AND ENGINEERING

ASSIGNMENT QUESTIONS

| Course Name | INFORMATION RETRIEVAL SYSTEM |
|----------------|---|
| Course Code | A70533 |
| Class | IV B. Tech I Semester |
| Branch | Computer Science and Engineering |
| Year | 2018 – 19 |
| Course Faculty | Ms. S.J. Sowjanya, Associate Professor, CSE |
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OBJECTIVES:

To meet the challenge of ensuring excellence in engineering education, the issue of quality needs to be addressed, debated and taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education. The major emphasis of accreditation process is to measure the outcomes of the program that is being accredited.

In line with this, Faculty of Institute of Aeronautical Engineering, Hyderabad has taken a lead in incorporating philosophy of outcome based education in the process of problem solving and career development. So, all students of the institute should understand the depth and approach of course to be taught through this question bank, which will enhance learner's learning process.

ASSIGNMENT - I & II

| S. No | Questions | Blooms Taxonomy Level | Course Outcomes |
|-------|--|-----------------------------|--------------------|
| | UNIT – I | - | |
| 1 | Differentiate DBMS with information retrieval system. | Understand | 2 |
| 2 | Explain IRS browse capabilities. | Understand | 1 |
| 3 | List three differences between data retrieval and information retrieval. | Remember | 2 |
| 4 | Explain Precision and Recall. | Understand | 1 |
| 5 | Define similarity coefficient in vector space model. | Remember | 2 |
| 6 | Differentiate relevant retrieved and non-relevant retrieved. | Remember | 2 |
| 7 | State how browsing is different from Searching. | Understand | 1 |
| 8 | Give a note on digital libraries and data warehouses. | Understand | 1 |
| 9 | List five challenges of searching for information on the web. | Remember | 1 |
| 10 | Explain about the objectives of IRS. | Understand | 2 |
| | UNIT – II | | |
| 1 | Explain N-gram data structure. | Remember | 5 |
| 2 | Describe regression analysis. | Understand | 3 |
| 3 | Define term co-occurrence. | Remember | 4 |
| 4 | Explain the concept of information extraction. | Understand | 4 |

| 5 | Explain top-down and bottom-up procedure used in hierarchically clustered Collections. | Understand | 3 |
|---------------|--|------------------------|----------|
| 6 | List six different sort orders to expand initial query in probabilistic model. | Remember | 5 |
| 7 | Discuss efficiency uses in clustering. | Understand | 3 |
| 8 | List different clustering algorithms. | Understand | 3 |
| 9 | Explain relevance feedback. | Remember | 4 |
| 10 | Define regression analysis. | Understand | 3 |
| | UNIT – III | | |
| 1 | Define K-distance. | Remember | 8 |
| 2 | What is translation? | Understand | 7 |
| 3 | Explain clustering. | Understand | 9 |
| 4 | Illustrate cross language information retrieval. | Remember | 6 |
| 5 | Define query translation. | Remember | 8 |
| 6 | Explain phrase translation. | Remember | 7 |
| 7 | Define document translation. | Remember | 6 |
| 8 | Explain unbalanced approach of choosing translation. | Understand | 7 |
| 9 | Write about structured queries. | Remember | 6 |
| 10 | State cross language information retrieval. | Remember | 9 |
| | UNIT – IV | | |
| 1 | Define term clustering. | Remember | 10 |
| 2 | What are various types of automatic term clustering techniques. | Remember | 11 |
| 3 | List hypertext linkages. | Understand | 12 |
| 4 | Describe document clustering. | Understand | 10 |
| 5 | Explain about hierarchy of clusters with example. | Remember | 11 |
| 6 | Give the technique for term clustering. | Understand | 10 |
| 7 | What is the process of thesaurus generation? | Understand | 10 |
| 8 | Describe Cliques. | Understand | 12 |
| 9 | What is single link? | Understand | 11 |
| 10 | Differentiate Cliques and single link. | Remember | 12 |
| | UNIT – V | | |
| 1 | Describe various information visualization technologies. | Remember | 13 |
| 2 | Write a short note about searching the internet. | Understand | 13 |
| 3 | Explain relevance feedback. | Remember | 14 |
| 4 | Define Rocchio algorithm for relevance method. | Remember | 15 |
| 5 | Write about relevance feedback techniques. | Understand | 14 |
| 6 | Define the features related to cognitions and perception. | Remember Understand | 13 |
| 7 | List some search statements and binding. Explain Similarity measures. | Remember | 15 |
| <u>8</u> 9 | Define ranking. | Remember | 15 14 |
| 10 | Give some similarity measures and ranking. | Understand | 15 |

Prepared by: Ms. S. J. Sowjanya, Associate Professor, CSE. Mr. N. V. Krishna Rao, Associate Professor, CSE Mr. C. Praveen Kumar, Assistant Professor, CSE