Code No.: 20525

MR12

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)
Maisammaguda, Dhulapally,(Post Via kompally), Secunderabad-500 100.

IV B.TECH I SEM SUPPLEMENTARY EXAMINATIONS, APRIL – 2017

SUBJECT: **Data Warehousing and Data Mining**

(BRANCH: CSE)

Time: **3 Hours** Max Marks:75

Answer any 5 questions **5 x15=75M**

1. a) Explain about the Concept Hierarchy Generation for Categorical Data?

   b) Define KDD? Discuss about Attributes and Measurement?

2. **a)** Differentiate the common techniques used in ROLAP and MOLAP**?**

   b) Discuss bottom up approach used for Data Cube Implementation?

3. a) How to mine Quantitative Multidimensional Association Rules from Relational Database? Give Illustrations.

   b) Explain Apriori Algorithm with example?

4. a) Describe the Back Propagation Algorithm used in Neural Networks?

   b) Explain the measures for Classification Accuracy?

5. a) Define Distance Based Outlier? Illustrate the Efficient based Algorithms fro mining Distance Based Algorithm.

   b) Demonstrate the following Hierarchical Methods:

   i) BIRCH ii) CHAMELON

6. a) List the Characteristics Exhibit by Social Network? Describe Forest Fire Model.

   b) Discuss Sequence Pattern Mining of Biological Data?

7. a) Explain the features of World Wide Web and Discuss Taxonomy of Web Mining?

   b) Summarize the Descriptive Mining of Complex Data Objects?

8. a) Write a note on Social Impact of Data Mining?

   b) Explain briefly about the Ubiquitous and Invisible Data Mining?

Code No.: **20523** | MR12

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IV B.TECH I SEM SUPPLEMENTARY EXAMINATIONS, APRIL – 2017

SUBJECT: **LINUX PROGRAMMING**

(BRANCH: **CSE**)

Time: **3 Hours** Max Marks:75

Answer any **Five** Questions 5x15=75

1. Discuss about various file handling utilities available in LINUX. Quote various options and examples for each. [15]
2. (a) Write a sed script to print all the lines of file that is passed as command line argument by changing the string Vijayawada with Amaravathi.

   (b) Write in detail with examples on the commands fgrep,ps and tar. [8+7]
3. Explain various control structures supported by shell programming examples. [15]
4. (a) Explain about UNIX directory file API?

   (b) Explain about file and Record locking? [8+7]
5. (a) Write a C program to create a zombie process print the process details using ps command.

   (b) Write a C program to print the numbers in between 1 to 10 with a time interval of one second using alaram and signal sytem calls. [7+8]
6. Compare IPC functionality provided by pipes and message queues. What are the advantages and drawbacks of each? Explain briefly. [15]
7. Write in detail about how threads can be synchronized using semaphores and mutex primitives with example code. [15]
8. Explain the following functions

   (a) Socket( ) (b) bind( ) (c) connect( ) [5+5+5]

Code No.: 206E1 MR12

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IV B.TECH I SEM SUPPLEMENTARY EXAMINATIONS, APRIL – 2017

SUBJECT: **DESIGN PATTERNS**

(BRANCH: **CSE**)

Time: **3 Hours** Max Marks: 75

Answer any 5 questions **5 x 15M = 75 M**

1. a) What are the design patterns? Explain how design patterns solve design related issues **[5M]**
   b) Discuss the 7-step approach to apply a design patters effectively. **[10M]**

2. Explain in detail about Lexi's spelling checking and Hyphenation problem **[15M]**

3. a) What are the issues that arise when applying Factory method pattern? How do you address them **[5M]**
   b)Discuss the intent, applicability, and use of Builder pattern **[10M]**

4. a)Write about consequences and implementation issues of Bridge pattern **[8M]**
   b) Describe sample code and known uses of Adapter design pattern **[7M]**

5. a) Discuss about Flyweight design pattern **[8M]**
   b) Explain sample code and known uses of Façade design pattern **[7M]**

6. a)How to provide a way to access the elements of an aggregate object sequentially without exposing its underlying representation ? Explain **[8M]**
   b) Briefly explain about Chain of responsibility design pattern **[7M]**

7. a) What is the intention of the Strategy pattern? What is its applicability **[5M]**
   b) Assume that you are writing an algorithm. Explain with the help of an example how Template method pattern can help you, **Note:** Sample code is essential. **[10M]**

8. a) The concept of patterns started by Christopher Alexander in civil engineering to help the architects in designing the houses. Do you think patterns are needed in Software development? In what way can design patterns help software designers (if it all) **[8M]**
   b) What is the role of patterns in software industry? Are 23 design patterns enough or do we need any additional patterns for software architecture ? Explain with help of examples **[7M]**

Code No.: 205C3 MR12

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

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IV B.TECH I SEM SUPPLEMENTARY EXAMINATIONS, APRIL – 2017

SUBJECT: **Information Retrieval Systems**

(BRANCH: Common to **CSE & IT**)

Time: **3 Hours** Max Marks: 75

Answer any 5 questions **5 x 15M = 75 M**

Q1. **[5+5+5]**

a) Explain the objectives of Information Retrieval System?
b) Explain Numeric date ranges & natural language queries?
c) Write short notes on
i) Item Normalization ii) Index Database

Q2. **[7+8]**

a) Explain Indexing by Term, Indexing by Concept & Multimedia Indexing?
b) Explain porter stemming algorithms & Dictionary look up stemmers with Examples?

Q3. **[8+7]**

a) Explain Index Phrase generation in natural language?
b) Explain the problems of Weighting schemes & Vector model?

Q4. **[5+5+5]**

a) What are the characteristics of clustering & explain them?
b) Explain the Generation of Thesaurus?
c) Explain automatic term clustering with vector & term example?

Q5. **[5+5+5]**

a) Explain ranking algorithms?
b) What are the aspects of visualization process?
c) Explain similarities measures with normalization factors?

Q6. **[5+5+5]**

a) Explain Fast data finder architecture?
b) Describe Boyer-Moore algorithm in detail?
c) What are the Measurement examples of TREC results?

Q7. **[5+5+5]**

a) Explain graph retrieval techniques in detail?
b) Define and distinguish tracking and detection?
c) List the application for content based video & Explain?

Q8. **[7+8]**

a) Explain about Standard Generalized Markup Language (SGML) with examples?
b) Describe prototypes, Projects & Interfaces?

Code No.: 205B2 MR12

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

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IV B.TECH I SEM SUPPLEMENTARY EXAMINATIONS, APRIL – 2017

SUBJECT: **CLOUD COMPUTING**

(BRANCH: **CSE**)

Time: **3 Hours** **Max Marks:75**

Answer any 5 questions **5 x15M =75M**

1. a) Explain the block diagram of Grid Computing. **[7M]**
   b) Comment on the concept of Virtualization. Discuss its benefits **[8M]**
2. a) Throw light on the challenges that could is facing in the current age? **[10M]**
   b) List out the key characteristics of cloud computing **[5M]**
3. How are web services delivered from a cloud explain **[15M]**
4. What is meant by privacy? How is it related to a cloud based information system **[15M]**
5. Explain the following
   a) Standards for security **[7M]**
   b) Standards for Messaging **[8M]**
6. Write notes on
   a) Face book b) Zimbra c) Android **[6M+ 3M+ 6M]**
7. As a Case study of cloud discuss the highlights of
   a) Amazon cloud front **[7M]**
   b) Amazon EC2 **[8M]**
8. a) List the usage of CRM applications **[6M]**
   b) Write short note on
      i. Microsoft Azure
      ii. Sales force.com CRM
      iii. Google App Engine **[9M]**

Code No.: 20526 MR12

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IV B.TECH I SEM SUPPLEMENTARY EXAMINATIONS, APRIL – 2017

SUBJECT: **Computer Graphics**

(BRANCH: **CSE**)

Time: **3 Hours** Max Marks:**75**

Answer any 5 questions **5 x15=75M**

1. a) Explain the design issues in color CRT monitors. **[8+7]**
   b) Consider a raster system with resolution of 640×480. How many pixels could be accessed per second by a display controller that refreshes the screen at a rate of 60 frames per second. What is the access time per pixel?

2. a) Explain in detail about Raster Scan system? **[7+8]**
   b) Explain in detail about Ellipse generation algorithm?

3. a) What is meant by composite transformations? **[8+7]**
   b) Write the general form of a scaling matrix with respect to a fixed point P(h,k) where the scaling factors in x and y directions are a and b respectively.

4.a) Explain in detail about Viewing Co-ordinate reference Frame. **[7+8]**
   b) Explain about Window to View port Co-ordinate Transformation.

5.a) Demonstrate with the help of blending functions that B-spline method follow local control.
   b) Distinguish the properties of B-spline and Bezier curves. **[8+7]**

6.a) Discuss about translation in 3-D transformations. **[7+8]**
   b) Explain in detail about 3D viewing pipeline.

7. a) Explain about Back Face Detection. **[7+8]**
   b) Explain about Octree Method.

8. Write short notes on the following **[5+5+5]**
   a) Computer animation languages.
   b) Motion Specification.
   c) Key frame systems

Code No.: 20524 MR12

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IV B.TECH I SEM SUPPLEMENTARY EXAMINATIONS, APRIL - 2017

SUBJECT: **MOBILE COMPUTING**

(BRANCH: **CSE**)

Time: **3 Hours** Max Marks:75

Answer any **Five** Questions 5x15=75

1. a) Explain GRPS Architecture? [7M]
   b) List the different types of Handovers in satellite? Explain in detail [8M]
2. a) Describe the system architecture of IEEE 802.11 [8M]
   b) Briefly discuss about routing in mobile Adhoc networks [7M]
3. a) Discuss about mobile IP in detail [8M]
   b) Write a short note on Reverse Tunneling? [7M]
4. Explain in detail about mobile TCP?
5. a) Explain Query processing in detail [7M]
   b) Write short note on Data recovery process [8M]
6. Explain about selective tuning and indexing methods? [15M]
7. a) Explain the Applications and Challenges of MANET [5M]
   b) Write short note on Mobile Agents and Service Discovery [10M]
8. Write short notes on: a) WAP b) J2ME [7M+8M]