Code No.: **40528** | **MR14**

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)
Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad

IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

SUBJECT: **Application Programming**

(BRANCH: **CSE**)

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

PART-A

I. Answer all the questions **5 x1=5M**

1. Explain the CTS class types.
2. What is inheritance?
3. List the characteristics of abstract classes.
4. What is a delegate?
5. What is the difference between ADO and ADO.net?

II Answer all the questions **10 x 2=20M**

1. Name any four applications that are supported by .net frame work.
2. Write the difference between CLS and CTS.
3. Write the difference between implicit and explicit type casting?
4. How to use pass by value mechanism in C#?
5. How can we create custom exception?
6. What is the need of an object?
7. Briefly explain the benefits of .NET assemblies.
8. Differentiate between synchronous and asynchronous delegate?
9. What is the use of data adapter?
10. Explain any three properties of data column?

PART-B

Answer all the questions **5 x 10=50 M**

1. How to build an application using Microsoft Visual studio 2010.explain with an example

OR

2. Explain how to build a .NET application using notepad++ with an example
3. a) Explain the method parameters keywords in C# namely "ref" and "out" with suitable examples.
   b) Explain C# Nullable Type with an example.

OR

4. a) What are the categories of value type data types supported by C#?
   b) What is the difference between stack memory and heap memory? Explain by taking an example?
5. a) Define Interface. Write a program to demonstrate multiple base class type of inheritance in C# language.
   b) Explain the various methods and properties of System exception class.

OR

6. a) What is a shadowing member in C# programming? Illustrate the shadowing member by taking an example.
   b) Describe system level and application level exceptions.

7. a) With a neat illustration, explain the digital signature generation and embedding into the assembly based in part on public and private key data.

   b) Explain <codebase> element and System. Configuration namespace.

OR

8. What is mean by the .NET delegate type? Explain the concept with example code.

9. a) Give definitions for IDbDataParameter and IDataParameter Interfaces.

   b) List the seven methods of dataset along with its usage.

OR

10. Explain the following terms briefly.

    a) Data Adapter b) Data set c) Data Reader

Code No.: **40B02** | **MR14**

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IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

SUBJECT: **Management Science**

(BRANCH: **CSE**)

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

PART-A

I. Answer all the questions **5 x 1 = 5 M**

1. List out the functions of Management.?
2. List out three advantage of decentralization.
3. What is EOQ?
4. What is the difference between PMIR and HRM?
5. What is value chain analysis?

II Answer all the questions **10 x 2 = 20 M**

1. Define Management.
2. Give one example of corporate social responsibility.
3. What is line organization?
4. What is the difference between lean and flat organization structures?
5. What is mass production?
6. Write a short note on ABC Analysis.
7. What are the two types of recruitment?
8. Define Grievance.
9. What do you mean by policy?
10. Write a short note on six sigma

PART-B

Answer all the questions **5 x 10 = 50 M**

Q1. Discuss about Hawthorne studies and contributions of Elton Mayo to human relations approach.

(OR)

Q2. Explain the differences between Maslow's and Douglas McGregor's theories of motivation.

Q3. Elaborate the basis of departmentation in organizations.

(OR)

Q4. Elaborate the following:

a) Committee organization b) Inverted Pyramid organization c) Matrix organization

Q5. Construct X and R chart from the following information and state whether the process in control. For each of the following X has been computed from a sample of 5 units drawn at an interval of half an hour from an ongoing manufacturing process.

Sample	1	2	3	4	5	6	7	8	9	10
X	20	34	45	39	26	29	13	34	37	23
R	23	39	14	5	20	17	21	11	40	10

(OR)

Q6. Explain the functions of marketing in detail.

Q7. "HR manager's role is challenging". Discuss in the context of various functions that he performs.

(OR)

Q8. "The success or failure of the organization depends on the skills of their employees". Discuss the statement in the light of various training methods and its uses.

Q9. Discuss in detail the steps in strategy formulation and implementation.

(OR)

Q10 Elaborate the following:

MIS b) End User Computing c) Materials Requirement Planning (MRP)

Code No.: **405B2** | **MR14**

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IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

SUBJECT: **Big Data Analytics**

(BRANCH: **CSE**)

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

PART-A

I. Answer all the questions **5 x1=5M**

1. What is structured data? Give example
2. Define Clustering?
3. What is big data analysis?
4. What is correlation coefficient.
5. What are the different modes of Hadoop?

II. Answer all the questions **10 x 2=20M**

1. Write about Statistical data mining?
2. Explain term extraction?
3. Justify the term data born from data
4. What is data description and reduction?
5. Discuss "Results Review".
6. Discuss the importance of resource description frame work in XML?
7. Write notes on box-and-whiskers plot
8. What are types of Assessments?
9. Explain RBase?0
10. What is Edit log?

PART-B

Answer all the questions **5 x 10=50M**

1. Describe the process of machine translation and Explain introspection

OR

2. Explain the role of Semantics and ontologies in the Big Data?
3. Describe frequency Distribution and how to normalize and adjust data in healthcare give an example

OR

4. a) Explain about zero-knowledge reconciliation
   b) Write notes on clustering algorithms.
5. Explain legalities and Societal issues of big data.

OR

6. Write short notes on below terms
   a. Fixing Data b. Bigness Bias c. Too much Data
7. Explain predictive contribution coefficient.

OR

8. Explain about Paired –variable assessment under CHAID based data mining?
9. Explain basic building blocks of Hadoop with a neat sketch?

OR

10. Describe about RHIPE in detail

Code No.: **405B1** | **MR14**

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IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

SUBJECT: **Mobile Application Development**

(BRANCH: **CSE**)

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

PART-A

I. Answer all the questions **5 x1=5M**

1. What is J2ME?
2. Does android support other language than java?
3. What is ADT Plugin?
4. What is an Activity?
5. What is the difference between Database and file system?

II. Answer all the questions **10 x 2=20M**

1. What is the difference between MIDlets and applets?
2. Mention different types of mobile applications.
3. How to configure android tools?
4. Explain the Android application Architecture.
5. Why emulator is used?
6. Write about android Jellybean.
7. How would you check for the presence of a Compass sensor on the system using the has System Feature () method?
8. What is relative Layout in Android?
9. List out the standard SQLite commands?
10. What is SQLite? How does it differ from client-server database management systems?

PART-B

Answer all the questions **5 x 10=50M**

1. What is MIDLET? Design a MIDlet to diplay "Hello World" on the screen and also discuss about the tool and execution process.

OR

2. What is retrofit Android? Explain briefly.
3. Discuss android SDK build tools?

OR

4. Develop an Android application for student registration form. (Explain each step clearly)
5. Explain in detail about user interface and its types?

OR

6. Explain about Android emulator? What is the role of emulator in Android application development?
7. Explain in detail about: a) Activity Lifecycle b) Toggle buttons, Form Widgets, Layouts .

OR

8. a) Differentiate between linear layout and Relative layout?
   b) What are the two types of intents in Android? Discuss briefly
9. What is an SQLITE_SCHEMA error, and why am I getting one? I get some compiler warnings when I compile SQLite. Isn't this a problem? Doesn't it indicate poor code quality?

OR

10. How can you see database in Android studio? Discuss briefly.

Code No.: 405C1 | MR14

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IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

Branch: **CSE**

Subject: **Advanced Computer Architecture**

Time: 3 hours **Max. Marks: 75**

PART – A

I. Answer All Questions **5x1Mark=5 Marks**

1. Define Computer architecture.
2. Give examples for the two different conventions of ordering the bytes within a larger object. How is the type of an operand designated?
3. What is Threading?
4. Write the equation to determine average memory access time of a computer.
5. Define Split transactions.

II. Answer All Questions **10x2Mark=20 Marks**

1. Mention the reasons why the cost of a manufactured computer component decreases over time even without major improvements in the basic implementation technology?
2. Briefly explain the following terms: i). Execution time ii). CPU time
3. Provide the table for the typical combinations of memory operands and total operands per typical ALU instruction with examples of computers.
4. What are the different types of Operation in Instruction Set Architecture?
5. Compare Little Endian and Big Endian conventions of ordering the bytes. Give example system foe each.
6. Explain about VLIW approach.
7. Provide the steps for mapping of a virtual address to a physical address via a page table.
8. Write about distributed shared memory.
9. Describe about different types of buses?
10. What are different RAID levels?

PART-B

Answer All Questions **5x10 Marks= 50Marks**

1. a. What are the factors that affect the cost of a computer design?
   b. Explain distinction between cost and price

OR

2. a. Suppose we have made the following measurements:
   Frequency of FP operations (other than FPSQR) = 20%
   Average CPI of FP operations = 3.8
   Average CPI of other instructions = 1.28
   Frequency of FPSQR= 2%
   CPI of FPSQR = 18
   Assume that the two design alternatives are to decrease the CPI of FPSQR to 2 or to decrease the average CPI of all FP operations to 2.3. Compare these two design alternatives using the CPU performance equation.
   b. What is Locality of Reference? Explain the various forms of Locality of Reference with suitable example.

3. a. Describe the advantages and disadvantages of the three most common types of general-purpose register computers.
   b. Discuss the various Categories of instruction operators and give examples of each

OR

4. What are different types of Addressing modes? Explain them with example instructions?
5. a. Discuss the hardware model of ILP?
   b. Write a note on tournament predictor

OR

6. (a). What is Control Dependences? Explain Control Dependences with suitable example.
   (b). Explain the basic structure of a MIPS floating point unit using Tomasulo's algorithm.

7. a. Explain the various steps for Improving Cache Performance.
   b. Detail the working of Third Miss Penalty Reduction Technique for Giving Priority to Read Misses over Writes.

OR

8. A) Explain in detail the following terms : i) Virtual memory ii) Virtual machine
   B) Explain the crosscutting issues of memory hierarchy?

9. a. Describe the various Performance Challenges, Dependability and Scalability Advantage of Clusters.
   b. Explain the various theoretical equations for calculation the Cost and Performance of a Cluster for Transaction Processing.

OR

10. a. Describe the various Practical Issues for Commercial Interconnection Networks.
    b. Discuss the various organizations of cluster based on uniprocessors with neat diagram.

Code No.: **405C3** **MR14**

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IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

Branch: **CSE**

Subject: **Advanced Databases**

Time: 3 hours **Max. Marks: 75**

PART – A

I. Answer All Questions **5x1Mark=5 Marks**

1. What is replication transparency?
2. What is database fragmentation?
3. What is the difference between loose coupling and tight coupling?
4. Explain about query optimization.
5. What is nested transaction?

II. Answer All Questions **10x2Mark=20 Marks**

1. What is normalization? Why is it needed?
2. Define 3NF.
3. Explain peer-to-peer distributed system?
4. What is top-down design process?
5. What is the need of query decomposition?
6. Mention the names of layers in query processing.
7. Explain Cartesian product with an example.
8. Write a general formula for response time.
9. What are the termination conditions of a transaction?
10. Write about wound wait deadlock avoidance technique.

PART-B

Answer All Questions **5x10 Marks= 50Marks**

1. Write the difference between shared memory multi processor and shared disk multi processor

OR

2. List and explain the problems that might exist in relational scheme.
3. Explain horizontal fragmentation in detail with an example.

OR

4. Explain in detail partitioning algorithm.
5. Give an example of reduction for primary horizontal fragmentation and vertical fragmentation.

OR

6. Explain Layers of Query Processing.
7. Write an algorithm for a) INGERS algorithm b) System R algorithm.

OR

8. Explain distributed query optimization algorithms.
9. Discuss the Three-Phase Commit protocol in detail.

OR

10. Write and explain centralized 2 phase locking algorithm.

Code No.: 40530

MR14

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IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

Branch: **CSE**

Subject: **Cloud Computing**

Time: 3 hours **Max. Marks: 75**

PART – A

I. Answer All Questions **5x1Mark=5 Marks**

1. What is cloud computing?
2. What is meant by PAAS in cloud?
3. Define privacy in cloud.
4. What do you mean by Collaborating on Event Management?
5. Specify at least one feature provided by Amazon S3?

II. Answer All Questions **10x2Mark=20 Marks**

1. What is p2p computing? Give example.
2. List out different companies in the cloud today
3. Specify the advantages and disadvantages of cloud development?
4. List out at least four services of cloud.
5. List various security fundamentals used in architecture design.
6. What is the autonomic security?
7. Briefly explain how can you manage contact lists on cloud environment?
8. Explain how cloud computing is Collaborating on To-Do Lists
9. List the services of Amazon SQS.
10. What are the windows live?

PART-B

Answer All Questions **5x10 Marks= 50Marks**

1. a) Explain the cloud computing in real time applications.
   b) Write the disadvantages of cloud computing.

OR

2. Justify your answer for companies in cloud today?
3. Explain the following
   a) Amazon's elastic cloud b) Difference between Amazon EC2 and Google App engine

OR

4. a) Explain about the GOOGLE engine applications.
   b) Write about AMAZON EC2.
5. a) Discuss about identity management and access control.
   b) Explain micro architectures with suitable example

OR

6. Explain how the following factors influence and directly affect the cloud security architecture
   i) security management ii) information classification iii) employee termination
7. Explain cloud computing for the corporation in detail.

OR

8. ~~Explain cloud computing for the corporation~~ Explain the impact of cloud computing on a family.
9. Explain Oracle OBIEE cloud in detail.

OR

10. Explain in detail about case study on Amazon S3

Code No.: 40529 MR14

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IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2018

SUBJECT: **LINUX PROGRAMMING**

(BRANCH: **CSE**)

Time: 3 hours **Max. Marks: 75**

PART – A

I. Answer All Questions **5x1Mark=5 Marks**

1. Write a SED command to print the last two lines of a document?
2. Define a system call.
3. Explain links and its uses in Linux?
4. List out the types of IPC mechanisms?
5. Distinguish between client and server.

II. Answer All Questions **10x2Mark=20 Marks**

1. Describe AWK variables.
2. Write a command to search for the files that start with 'cse' in the current directory and then display the contents of the file?
3. Explain by script to display GOOD MRNG, GOOD AFTERNOON, GOOD NIGHT based on system time whenever user logs on.
4. Write about input redirection and output redirection?
5. List advantages and disadvantages of inode.
6. Write about fork() in linux?
7. Explain about synchronization and How synchronization is achieved with Semaphores.
8. Write about semaphores in processes?
9. Explain tcp socket connection establishment with a neat diagram.
10. Write at least two socket system calls?

PART-B

Answer All Questions **5x10 Marks= 50Marks**

1. a) Discuss elaborately the Unix kernel architecture with neat block diagram.

   b) Illustrate 'rlogin' , 'telnet', 'ftp', 'arp', network commands with example?

   OR

2. Explain about security by file permissions in Linux.

3. Explain different control structures used in Shell programming with suitable examples?

   OR

4. Write a shell script to check whether the given string is palindrome or not by reading value from command line.

5. a) Define region lock? What are the rules about the specification of the region to be locked or unlocked?
   b) Discuss about process API.

OR

6. a)Write a C program to print all the filenames with inode numbers recursively in a directory whose
   name is given with command line argument using directory system calls?
   b) Describe the characteristics of Unix File System

7. Compare the IPC functionality provided by pipes and message queues. What are the advantages and disadvantages of each? Explain briefly.

OR

8. Explain about the following
   a) Message queues b) Shared memory

9. Write a program for shared memory forms of IPC using producer consumer relation in such a way that consumer should read only after the producer has written some text to the shared memory.

OR

10. Explain briefly about the following socket APIs with clear syntax:
    (i) socket( )
    (ii) bind( )
    (iii) listen( )
    (iv) accept( ).