MR15-2015-16 Batch

Code No.: 50527

## 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-2019

Subject: Data Mining and Data Warehousing

Branch: CSE

Time: 3 hours

PART – A

Max. Marks: 60

Answer **ALL** questions of the following

5x2Marks=10 Marks

- 1. Define data mining?
- 2. Write about the advantages of a Data ware house?
- 3. Define lift measure?
- 4. How can you measure the classifier accuracy?
- 5. Define chameleon method?

#### **PART-B**

Answer any FIVE Questions of the following

- 1. a) Explain KDD process in detail with a neat diagram.
  - b) Explain two lossy data compression techniques.
- 2. a) Explain Fact table. Explain in brief about Snow Flake Schema?
  - b) Differentiate between OLTP and OLAP?
- 3. a) Explain in brief about Mining Multi dimension and multi level Association rules?
  - b) Discuss in brief about APRILori algorithm?
- 4. a) Write about genetic alogarithm.
  - c) Explain the concept of Bayesian Classification.
- 5. a) Define Cluster Analysis. Briefly explain the types of Data in Cluster Analysis.
  - b) How multi dimensional analysis of multimedia data can be performed.
- 6. a) On what kind of data, data mining techniques can be applied?
  - b) With examples, describe in detail about the available techniques for concept Hierarchy Generation for categorical data.
- 7. a) Explain the three-tier data warehouse architecture.
  - b) Explain how Attribute Oriented Induction can be used to generalized the data.
- 8. Write short notes on any **TWO** of the following
  - a) Advanced DB applications.
  - b) Multi dimension Data model?
  - c) Raster data bases.

**MR15** 

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### IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2019

Subject: Advanced Computer Architecture

Branch: CSE

Time: 3 hours

Max. Marks: 60

PART - A

Answer ALL questions of the following

5x2Marks=10 Marks

- 1. Explain the importance of GPU.
- 2. Write a short note on cuBLAS subroutine levels.
- 3. Write the command to verify the CUDA-capable GPU.
- 4. Label the term "variable lifetime"
- 5. Write the functionality of cudaEventRecord().

#### **PART-B**

Answer any FIVE Questions of the following

5x10 Marks= 50Marks

- 1. Discuss briefly about the GPU computing architecture with neat diagram.
- 2. Explain how the following libraries deal with memory.
  - a) cuSPARSE
- b) cuBLAS
- 3. Define kernel and explain about calling kernel on device.
- 4. a) Write short notes on NVIDIA CUDA compiler.
  - b) How to determine the exact device memory usage at a particular point?
- 5. Discuss briefly about models of parallel computations.
  - a) SIMD

- b) MIMD
- 6. a) Explain about data parallel problem decomposition.

(7 Marks)

b) List few manufactures of GPU.

(3 Marks)

- 7. Demonstrate the cuRAND workflow for using the device API.
- 8. Write short note on any TWO of the following
  - (a) Summarize the benefits of multithreading.
  - (b) Explain the CUDA library used for processing the Computer Vision.
  - (c) With a neat sketch, explain the operations of processor with multiple functional units.

MR15 (2015-16 Batch)

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### IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2019

Subject: Cloud Computing

Branch: CSE

Time: 3 hours

PART - A

Max. Marks: 60

Answer ALL questions of the following

5x2Marks=10 Marks

- 1. What is collaborative computing?
- 2. Define the term web service.
- 3. What is security governance?
- 4. What do you mean by school schedules?
- 5. List the features of IBM clouds.

#### PART-B

Answer any **FIVE** Questions of the following

- 1. Explain the working principle of cloud architecture with neat sketch in detail.
- 2. a) Explain the key characteristics of Platform-as-a-Service (PaaS)
  - b) Explain implementation issues of Software-as-a-Service in detail
- 3. a) Explain secure execution environments and communications
  - b) Write notes on vulnerability assessment tool for cloud.
- 4. a) Discuss in detail on collaborating on group events.
  - b) Explain about collaborating on reports.
- 5. Explain in detail about Microsoft CRM
- 6. a) What is the importance of Cloud Computing?
  - b) Explain the cloud storage companies a) Microsoft SkyDrive
- 7. List and explain the advantages and disadvantages of cloud service development.
- 8. Write short notes on any TWO of the following
  - a) When to use PaaS
  - b) When not to use SaaS
  - c) Confidentiality and Integrity

Code No.: **50564** 

MR15 (2015-16 Batch)

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# IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2019

Subject: Artificial Intelligence

Branch: CSE

Time: 3 hours

PART – A

Max. Marks: 60

Answer ALL questions of the following

5x2Marks=10 Marks

- 1. What do you mean by the problem of plateau occurring in Hill Climbing? How can it be solved?
- 2. Write a predicate logic for the sentence given below:
- "Everyone in the world is loved by at least one person"
- 3. Define non monotonic reasoning.
- 4. List out the properties of min-max search in AI
- 5. What are the main areas of knowledge acquisition that require consideration in all ES (Expert System) projects?

#### PART-B

Answer any FIVE Questions of the following

5x10 Marks= 50Marks

- 1. a) Define AI? Illustrate Means-ends analysis with an example.
  - b) Explain algorithm for steepest hill climbing.
- 2. Consider the following facts.

The member of the St. Bridge club are Joe, Sally, Bill and Ellen.

Joe is married to Sally.

Bill is Ellen's brother.

The spouse of every married person in the club is also in the club.

The last meeting of the club was at Joe's house.

- a) Translate the above sentences into formulas in predicate logic.
- b) Prove that Ellen is not married.
- 3. What is non-monotonic reasoning? Explain different subtypes of non-monotonic reasoning in briefly.
- 4. Describe the alpha beta pruning and give the required modifications to the min max procedure to improve its performance.
- 5. a) State the reasons for pursuing computer vision.
  - b) List out the issues in speech recognition system.
- 6. Discuss AO\* algorithm in detail with an example.
- 7. a) Consider the following axioms:
  - i. Anyone whom Mary loves is a football star.
  - ii. Any student who does not pass does not play.
  - iii. John is a student. iv. Any student who does not study does not pass.
  - v. Anyone who does not play is not a football star.

Prove using resolution process that "If John does not study, then Mary does not love John".

- b) List the strategies used to speed up resolution proof.
- 8. Write short notes on any two of the following
  - a) Compare expert system with neural networks.b) Applications of Artificial Neural Networksc) Conditional planning

Code No.: 50543 MR15 (2015-16 Batch)

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## IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2019

Subject: Mobile Computing

Branch: CSE

Time: 3 hours

PART - A

Answer ALL questions of the following

5x2Marks=10 Marks

Max. Marks: 60

- 1. Define the term GSM and GPRS?
- 2. What do you mean by near and far terminals?
- 3. Why do we use Mobile IP Systems?
- 4. Define slow start?
- 5. Explain about data delivery Methods.

**PART-B** 

Answer any FIVE Questions of the following

- 1. a) Explain the architecture of mobile computing.
  - b) Describe the security services offered by GSM.
- 2. Assume that there are N stations. Stations transmit without sensing the channel. Under what conditions the performance f this scheme is good. When the performance is poor? How carrier sensing helps to improve the situation. When carried sensing helps little. What is the suggested solution then?
- 3. a) What is the main purpose of registration of a mobile node? Explain in detail.
  - b) What is the difference between care -of -address and co-located care of address?
- 4. Explain how indirect TCP overcomes the problems associated with conventional TCP in mobile environment
- 5. a) What are the advantages of hoarding the data at the mobile device?
  - b) Define QoS and does Internet provide QoS? Justify answer.
- 6. a) With the help of a diagram, explain system architecture of GSM
  - b) Discuss the protocol architecture of GSM
- 7. a) Define CSMA? Explain several versions of CSMA strategy.
  - b) Explain in detail, slotted ALOHA protocol and how it improves throughput as compared to pure ALOHA protocol.
- 8. Write short notes on any TWO of the following
  - (a) Explain classic ALOHA with neat sketch.
  - (b) Explain the functioning of Network and Switching Subsystem (NSS) and its registers in a GSM cellular system.
  - (c) write short notes on Mobile Transactions

Code No.: 50566

MR15 (2015-16 Batch)

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## IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL-2019

Subject: Machine Learning

Branch: CSE

Time: 3 hours

PART - A

Answer ALL questions of the following

5x2Marks=10 Marks

Max. Marks: 60

- 1. What is inductive learning hypothesis?
- 2. Demonstrate neural networks representation.
- 3. What is conditional independence?
- 4. Differentiate between Inductive and Analytical learning methods
- 5. What is Reinforcement learning?

### **PART-B**

Answer any FIVE Questions of the following

- 1. a) Write briefly about inductive biased hypothesis and unbiased learner.
  - b) How to design well-learning system for playing checkers problem?
- 2 a) Explain how hypothesis search is carried in decision tree learning.
  - b) Present the basic ID3 algorithm for learning decision trees and illustrate its operation.
- 3. a) Briefly explain Brute-force MAP learning algorithm.
  - b) Discuss the significance of locally weighted regression.
- 4. Demonstrate and discuss in detail learning sets of first order rules: FOIL.
- 5. Explain Inductive-analytical approaches to learning with learning problem
- 6. a) Illustrate with an example how to design a learning system.
  - b) Explain inductive bias.
- 7. a) Brief different types of neural networks and its applications
  - b) How do you measure accuracy for decision trees? What are the different sampling methods?
- 8. Write short notes on any TWO of the following
  - a. Distinguish between Sample Error and True Error.
  - b. Discuss the problem setting.
  - c. Discuss fitness function.

Code No.: 50526 MR15- 2015-16 Batch

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# IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL2019

Subject: Linux Programming

Branch: CSE

Time: 3 hours

PART – A

Answer ALL questions of the following

Max. Marks: 60

5x2Mark=10 Marks

- 1. List out any four file handling utilities with the examples.
- 2. Define redirection? Explain about output redirection with example?
- 3. What is a file descriptor? Explain.
- 4. Differentiate between reliable and unreliable signals?
- 5. What is socket? Write the syntax of socket() system call

#### **PART-B**

Answer any FIVE Questions of the following

- 1. a) Explain briefly about text processing and process utilities
  - b) Write short notes on SED and AWK.
- 2. a) Discuss about shell variable and their uses in Linux?
  - b) Explain about shell control structures?
- 3. a) Explain about record locking?
  - b) Explain about symbolic and hard links?
- 4. a) List and explain the system calls used for semaphores
  - b) Write about the following with syntax
    - i) kill ii) raise iii) alarm iv) pause v) abort
- 5. Explain the client server communication using connection less Sockets with an example program
- 6. a) Discuss about the Linux commands used for following File operations
  - i) Creating a file
  - ii) Displaying contents of a file
  - iii) Renaming files
  - b) Explain the following commands with syntax and examples.
    - i) mkdir
- ii) ls
- iii) rm
- 7. a) Explain about how to debug shell scripts?
  - b) Discuss how command line arguments are passed in shell scripts?
- 8. Write short notes on any TWO of the following
  - a. Explain about file name substitution and command substitution with example
  - b.Discuss process creation and process termination
  - c. What is shared memory? Discuss system calls used in shared memory

**MR15** 

Code No.: **50H13** 

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## IV B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, APRIL2019

Subject: Management Science

Branch: Common to EEE, ECE & CSE

Time: 3 hours

PART – A

Max. Marks: 60

#### Answer ALL questions of the following

5x2Mark=10 Marks

- 1. Nature of Management?
- 2. Decentralization.
- 3. What is Work Study?
- 4. Define critical path?
- 5. Business Process Outsourcing.

#### **PART-B**

### Answer any FIVE Questions of the following

- 1. a) Illustrate System Approaches.
  - b) Write about Herzberg's two factory theory of motivation.
- 2. a) What is departmentation and decentralization in business? Explain with examples.
  - b) Explain Line and staff organizational structure with example.
- 3. a) Explain in detail method study and time management?
  - b) Explain the marketing strategies for businesses at different stages of product life cycle.
- 4. What is difference between Compare HRM vs PMIR
- 5. a) Steps in strategy formulation and implementation.
  - b) Just-in-time system.
- 6. a) Discuss the criticism of scientific management?.
  - b) Elucidate F W Taylors Scientific management principles.
- 7. a) What are the basic concepts related to Organization?
  - b) Discuss the utility of organization structure in an organization.
- 8. Write short notes on any two of the following
  - (a) Marketing mix
  - (b) Explain the Principles of Plant layout.
  - (c) Enterprise resource planning