

Code No: R17A0525

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

IV B.Tech I Semester Supplementary Examinations, April 2024**LINUX Programming**

(CSE)

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Time: 3 hours**Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION-I

- 1 *A* Explain in detail about Text Processing Utilities and Backup Utilities. [8M]
 B Explain in detail about shell meta characters [6M]
- OR
- 2 *A* Write a detailed note on Shell Responsibilities with examples [7M]
 B Write about shell variables in Unix shell syntax using Sed. [7M]

SECTION-II

- 3 *A* Explore the Creating, removing and changing and current working commands with examples. [8M]
 B Differentiate soft link and hard link with examples. [6M]
- OR
- 4 *A* Describe Unix file system advantages and also state different commands used in System calls for I/O operations. [10M]
 B Explain the kernel support for file system [4M]

SECTION-III

- 5 *A* What is the need of exec() system call? Write a C program to illustrate exec() function [8M]
 B Write a detailed note on Signal functions [6M]
- OR
- 6 *A* Differentiate between fork() and vfork(). [5M]
 B Explain in detail about Kernel support for process Creation Mechanism [9M]

SECTION-IV

- 7 *A* Explain about named and unnamed pipe library functions with examples [7M]
 B Discuss about Kernel support for Message Queues [7M]
- OR
- 8 *A* List some APIs used for message queues and construct a sample code for Client –Server application using messages. [9M]
 B Write short notes on File locking with semaphores [5M]

SECTION-V

- 9 *A* Explain how to attach and detach a shared-memory segment. [7M]
 B Write a C Socket Program for Linux with a Server and Client Example Code. [7M]
- OR
- 10 *A* Explain with a program how to copy file data from server to client using shared memory [7M]
 B Explain briefly about the socket APIs with clear syntax: [7M]

Code No: R17A1204

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

IV B.Tech I Semester Supplementary Examinations, April 2024**Artificial Intelligence**

(CSE)

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Time: 3 hours**Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION-I

- 1 A Discuss the characteristics of AI problem. Can Towers of Hanoi problem be considered as AI problem? Justify your answer with suitable discussions. [7M]
 B Explain the Heuristic Search Techniques. [7M]

OR

- 2 A List and explain the applications of Artificial Intelligence. [7M]
 B Give an overview of different kinds of agent programs [7M]

SECTION-II

- 3 A Describe about A* algorithm. [7M]
 B Explain in brief about Forward Chaining and Backward Chaining Algorithms [7M]

OR

- 4 A Represent the following sentences using first-order logic: [7M]
 i) One's mom is one's female parent.
 ii) One's husband is one's male spouse
 iii) Parent and child are inverse relations.
 iv) A grand parent is a parent of one's parent.
 B Explain Alpha-Beta Pruning algorithm. [7M]

SECTION-III

- 5 A Monotonic and Non-Monotonic Reasoning in Artificial Intelligence [7M]
 B Explain the Causes of uncertainty with suitable example [7M]

OR

- 6 A Explain the advantages of Representing Knowledge in an Uncertain Domain [7M]
 B Discuss the advantages and disadvantages of Bayesian Networks [7M]

SECTION-IV

- 7 A The DECISION-TREE-LEARNING algorithm adopts a greedy divide-and-conquer strategy [7M]
 B Illustrate EXPLANATION-BASED LEARNING with examples. [7M]

OR

- 8 A Write short notes on different forms of learning [7M]
 B Discuss about Winston's Learning Program in detail [7M]

SECTION-V

- 9 A Explain the key components of expert systems [7M]
 B Expert system is built around a knowledge base module.—Justify the statement with suitable examples. [7M]

OR

- 10 A Explain about knowledge acquisition. [7M]
 B Write short notes on Development of Expert System [7M]
