

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No .....

**MCADD-705(1)**  
**M.C.A. (Integrated), VII Semester**  
Examination, May 2022  
**Unix and Shell Programming**

(Elective - II)

*Time : Three Hours*

*Maximum Marks : 70*

- Note :* i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) Discuss in brief UNIX file system structure. 7  
b) Explain Architecture of Unix Operating System. 7
2. a) Write a algorithm to convert a path to an Inode. 7  
b) Explain Linux structure in detail. 7
3. a) What is link System call? Discuss the algorithm for linking file. 7  
b) Differentiate list, arrays and Hashing by giving examples. 7
4. Mention Different loop-control structure that is used in shell programming. 14
5. a) Discuss vi editor with suitable example. 7  
b) Write and explain any five awk built in functions. 7

[2]

6. a) Discuss the algorithm for fork system call. 7  
b) Explain sleep process creation/ termination. 7
7. a) Explain PIPES System calls (Mounting & Un-mounting) 7  
b) Explain Semaphores in detail. 7
8. Write short notes on any Two. 14  
i) Unix security features  
ii) Write short note Pipes in Unix  
iii) Write a short note grep command  
iv) Write the mechanism of process creations

\*\*\*\*\*