vtuplanet.com

USN A m 0 0

10CS44

(04 Marks)

Fourth Semester B.E. Degree Examination, June 2012 **Unix and Shell Programming**

Time: 3 hrs. Note: Answer FIVE full questions, selecting

Max. Marks: 100

at least TWO questions from each part. $\frac{\mathbf{PART} - \mathbf{A}}{\text{With neat diagram, explain the architecture of unix operating system.}}$ 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice (06 Marks) With the help of a diagram, explain the parent-child relationship. Explain the unix file (06 Marks) system. Explain the following with examples: i) Absolute and relative path names ii) Internal and external commands. (08 Marks) A file's current permissions are rw _ r _ x r _ _ . Specify the chmod expression required to change them for the following: i) rwx rwx rwx iv) _ _ _ r _ _ r _ _ using both the relative and absolute methods of assigning permissions. (08 Marks) Explain briefly the file attributes listed using Is - I command. (06 Marks) What are the different modes of Vi editor? Explain with a diagram. (06 Marks) y C. Explain the three standard files with respect to unix operating systems. (06 Marks) Explain the mechanism of process creation. (06 Marks) Explain the following commands with an example: i) Running jobs in background ii) Execute later. (08 Marks) Explain the following environment variables with examples: a. ii) LOGNAME i) SHELL iii) PATH (06 Marks) Differentiate between hard link and soft link in unix with examples. (06 Marks) Explain the following commands with example: c. 3 i) tail ii) paste iii) tr iv) pr (08 Marks) PART - B With suitable examples, explain the grep command and its various options. (08 Marks) 2b. Explain the line addressing and context addressing in sed with examples. (06 Marks) Explain the different ways of using test statements, with examples. (06 Marks) What is shell programming? Write a shell program that will do the following tasks in order: 6 Clear the screen Print the current directory Display current login users. (08 Marks) Explain the shell features of 'while' and 'for' with syntax. (08 Marks)

What is the 'exit' status of a command and where is it stores?

What is AWK? Explain any three built in functions in AWK. (07 Marks) Write an AWK sequence to find HRA, DA and Netpay of an employee, where DA is 25% of basic, HRA is 50% basic and netpay is the sum of HRA, DA and basic pay. (07 Marks) Explain the list and arrays in PERL. (06 Marks) Explain the following storing handling functions of PERL with examples: 8 ii) index iii) substr iv) reverse (08 Marks) b. Write a PERL program to print numbers that are accepted from keyboard using while and array construct. (06 Marks) Explain the following in PERL with examples. i) fore each loping construct (06 Marks)

vtuplanet.com