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06CS36

Third Semester B.E. Degree Examination, December 2010

UNIX and Shell Programming

Time: 3 hrs. Max. Marks:100

Note: ***Answer any FIVE full questions, selecting at least TWO questions from each part.***

PART – A

1 a. Explain the architecture of UNIX operations system. (08 Marks)
b. Describe the salient features of the UNIX operating systems. (08 Marks)
c. Write a note on the man command. (04 Marks)

2 a. Explain the different types of files supported in UNIX. (06 Marks)
b. Interpret the significance of the seven fields of the *ls – l* output. (07 Marks)
c. Explain the three modes of the Vi editor. (07 Marks)

3 a. What are the standard input, standard output and standard error? Explain with respect to UNIX. (10 Marks)
b. What are file attributes? Explain how to change the basic file permissions, with an example. (06 Marks)
c. Explain the grep, with examples. (04 Marks)

4 a. How is a process created? Mention briefly the role of fork and exec system calls in the process creation. (08 Marks)
b. Define a job. How is job control done in UNIX? (06 Marks)
c. What are the shell variables that control the UNIX systems called? Explain atleast five of them. (06 Marks)

PART – B

5 a. Explain the following commands with an examples:
i) Head ii) Port iii) tr iv) Talk v) wc (10 Marks)
b. What is shell programming? Explain the shell feature of while and for with syntax. (10 Marks)

6 a. Explain the use of test and [ ] to evaluate expressions in shell. (08 Marks)
b. Explain the variable and operators in PERL. (06 Marks)
c. State any six built in variables in awk and explain each. (06 Marks)

7 a. Explain the list and array used in perl. Also write a perl program to convert decimal number to binary number. (10 Marks)
b. What is a hev document? Explain with an example. Also mention its use. (05 Marks)
c. Using command line arguments, write a perl program to find whether a given year is leap year. (05 Marks)

8 a. Write a note on awk, with options. (06 Marks)
b. Explain string handling functions in perl. (06 Marks)
c. How is file managed in perl? Explain with an example. (08 Marks)

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