



DHARMSINH DESAI UNIVERSITY, NADIAD
FACULTY OF TECHNOLOGY
B.TECH. SEMESTER I [IT/CE/MECH]

SUBJECT: (CT-115) LINUX OPERATING SYSTEM AND PROGRAMMING

Examination	: Block Exam	Seat No.	: _____
Date	: 29/11/2013	Day	: Friday
Time	: 11:30: to 12:45	Max. Marks	: 36

INSTRUCTIONS:

1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

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- Q.1 Answer the Following :** [12]
- (A) Give the figure of a sample directory structure in Linux. [2]
(B) Explain Inode & Inode Number. [2]
(C) Explain the meaning of the instruction: 4c4,5 with respect to diff command. [2]
(D) What is the difference between an argument and an option? [1]
(E) Give Examples of the following BRE Expression: [2]
(1) “**.*”
(2) “^*..”
(F) If I change the permissions of a file, which file time would be affected? [1]
(a) Last Modification Time (b) Last Access Time (c) Both (d) None
(G) Is it possible to create a hard link of a directory? Explain with proper reason. [2]
- Q.2 Answer the following.** [12]
- (A) Explain file permission with respect to a directory and a File. [4]
(B) (1) Explain uniq command with example. [4]
(2) What is the difference between while and until loop?
(C) Write a shell script to design the following pattern: [4]
A
B B
C C C
D D D D
E E E E E
- Q.3 Answer the following:** [12]
- (A) Explain “grep.” Command with all its options and proper examples. [4]
(B) Explain TRE in detail with example. [4]
(C) Write a shell script to find the following: [4]
Sum= 1! + 2! + 3! + 4! +.....+ n!, where value of n is entered by user.