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Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (IT) (Sem.-6)**

**NETWORK OPERATING SYSTEM**

**Subject Code : IT-326 (2007 & onward batches)**

**Paper ID : [A0527]**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A is COMPULSORY.**
2. **Attempt any FOUR questions from SECTION-B.**
3. **Attempt any TWO questions from SECTION-C.**

**SECTION-A (10 × 2 = 20 Marks)**

1. Write short notes on :

- (a) Define a Shell.
- (b) Give an echo command to display this message:  
It's <party> time!
- (c) What does the *test-s* file means?
- (d) What is the output of the pwd command after the following sequence of cd commands have been issued?  
\$ cd/usr/local  
\$ cd bin  
\$ cd ../../tmp  
\$ cd
- (e) Fill with the correct operator  
#!/bin/sh  
smallest = 10000  
for i in 5 8 19 8 7 3; do  
if test \$i ..... \$ smallest; then  
smallest=\$i  
fi  
done  
echo \$smallest
- (f) Which of the following are valid variable names?
  - a. \_FRUIT\_BASKET
  - b. 1\_APPLE\_A\_DAY

- c. FOUR-SCORE&7YEARS\_AGO
- d. Variable
- (g) Give an echo command to display one line containing the following fields:
  - a. The contents of variable \$USER
  - b. A single space
  - c. The word "owes"
  - d. Five spaces
  - e. A dollar sign (\$)
  - f. The contents of the variable \$DEBT (this variable contains only digits)
- (h) What is Shell Scripting ?
- (i) Which command can be used to duplicate a process or to create a child process? Give example.
- (j) Name at least two of the debugging tools available in LINUX.

#### SECTION-B

(4 × 5 = 20 Marks)

- 2. Write a shell script in Linux to prepare Student Result Card. Mention all the assumptions made.
- 3. Write a shell script to display
  - 0
  - 1 0
  - 2 1 0
  - 3 2 1 0
  - 4 3 2 1 0
- 4. What are the features which are common to Bourn and TC Shells? Describe.
- 5. Define a process. How do the processes communicate among each other?
- 6. Describe the Linux file system.

#### SECTION-C

(2 × 10 = 20 Marks)

- 7. What is an editor? What are the different types of editors? Discuss their features and the various types of commands available in the command mode.
- 8. Compare Linux with atleast two other Operating Systems of your choice. What is so good about Linux? Give some additional features of Linux.
- 9. What are the various Programming Tools available in Linux? Discuss the control structures used in shell programming.