BSIT 61 (OS)

VI Semester B.Sc. (I.T.) Examination, June/July 2010
UNIX SYSTEM PROGRAMMING

Time : 3 Hours Max. Marks : 75

Instruction : *Answer* ***all*** *questions from Part – **A** and answer* ***any five*** *questions from Part – **B.***

PART – A

1. Give the format and usage of KILL and RAISE functions. **(10×2+5×1=25)**
2. What are the three measures of time ? Which function allows to get the time ?
3. What are the three modes of I/O into a stream ?
4. What is the difference between malloc from realloc ?
5. Which are different file access permissions ?
6. What is a stream pipe ?
7. What is a shell ? Mention different types of shells.
8. Mention the disadvantage of Unix.
9. Write the commands to print
   a) Display current date
   b) Display calendar
10. What does Umask function will do ?
11. Define the following terms :
    a) Dead lock
    b) FIFOS
    c) TC getgraph function
    d) IPC
    e) Who am I command.

P.T.O.

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PART – **B**

Answer **any five** : **(5×10=50)**

1. Explain the following :
   a) Abort function b) Sleep function c) Raise function
   d) MKDIR e) CHMOD

2. a) Explain putenv, getenv and unsetenv functions briefly.
   b) Explain Unix process control briefly.

3. a) Explain different wait functions.
   b) Explain concept of file sharing briefly.

4. Explain semaphores along with syntax to create semaphore.

5. List and explain the advantages of Unix operating system.

6. Why record locking is needed ? Explain some functions for record locking.

7. a) List out some of the normal functions used in I/O operations and their usage methods.
   b) Explain termcap, terminfo and curser.

8. a) Explain the concept of dynamic memory allocation.
   b) What is a pipe ? What are its limitations ?

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