2008 VISVESVARAYA TECHNOLOGICAL UNIVERSITY
XI SEMESTER B.E DEGREE EXAMINATIONS
UNIX SYSTEM PROGRAMMING
(COMPUTER SCIENCE ENGINEERING)

JULY 2008

TIME: 3 HOUR
MAXIMUM MARK :100

Note: 1. Answer any Five full questions.

1. a Explain POSIX feature test macros.

b. Explain UNIX Kernal support for files with neat block diagram.

2.a Explain following API's with prototype i)open ii) creat iii) read iv) write.

b. Bring out the difference b/w hard link & symbolic link

c. Describe FIFO and device file classes.

3. a Explain file and record locking.

b. Illustrate the usage of mkfifo and mknod system call.

c. Explain five different ways of process termination.

4.a Explain with an example the use of setjmp and longjmp functions.

b. Explain fork & vfork system calls.when does fork system call fail?

5.a Explain diff exec functions, write C pgm to demonstrate the exec.

b. explain process accounting structure in Unix with an ex.

6.a Explain process groups and sessions.

b. Explain job control with an ex.

c. show the state of processes after login has been invoked.

7.a. Explain daemon characteristics and coding rules with an example.

b. Explain UNIX kernel support for handling different signals.

8.a Explain popen and pclose functions.

b. explain message queue with neat diagram.

c. Explain client server communication using FIFO.