

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-2008**III B.TECH SUPPLEMENTARY EXAMINATIONS
UNIX PROGRAMMING
(INFORMATION TECHNOLOGY, CSE)****AUG/SEP-2008****MARK-3 HOUR
MARK-80****ANSWER ANY FIVE QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.****MARKS [16*5=80]**

1. "Operating systems like UNIX provide services both for programs and users". Justify this statement with suitable examples.
2. What is a filter in UNIX? Explain any four filters in detail with examples.
3. (a) If x has the value 5, and you reassign it with `x="expr $x+10"`, what is the new value of x? What would have been the value if single quotes were used? What's wrong with all this anyway?
(b) Devise a script that accept 2 directory names bar1 and bar2, and deletes those files in bar2 whose contents are identical to their namespaces in bar1.
4. (a) Write a shell script which gets executed the moment the user logs in. It should display the message "good morning/good afternoon/good evening" depending upon the time at which the user logs in.
(b) Explain about here documents with an example.
5. Write syntax of following system calls.
 - (a) `chmod`
 - (b) `chown`
 - (c) `unlink`
 - (d) `link`.
6. Write the system calls for process termination in detail.
7. Write in detail about locking regions.
8. Explain the following concepts
 - (a) Pipes in single process
 - (b) Pipes in single process, immediately after fork