

**R7**

Code: R7 311503

B.Tech III Year I Semester (R07) Supplementary Examinations, May 2012

**UNIX PROGRAMMING**

(Computer Science and Systems Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

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- 1 (a) Give brief description about process related commands.  
(b) Explain the following commands with their syntax and example.  
(i).du (ii).df (iii).mount
- 2 (a) Explain the different forms of grep with suitable examples.  
(b) Give brief description about the following commands.  
(i). pg (ii). Cmp (iii). diff (iv). awk
- 3 (a) Write a C program to implement tail command.  
(b) Write a shell script to find the sum of the individual digits of a given number.
- 4 Explain the role of the following in shell programming.  
(a). case construct (ii). until loop (iii). for loop
- 5 Write short notes on the following system calls.  
(a). seekdir (b). fgetc (c). getchar (d). ioctl
- 6 (a) Draw and explain the typical structure of a user process.  
(b) Distinguish between fork and vfork functions.
- 7 (a) Describe in detail about shared memory.  
(b) Explain the role of advisory locking in Unix operating system.
- 8 (a) What are semaphores? Explain them in detail.  
(b) Give brief description about the FIFOs.

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