

[5155] - 274
M.E. (Computer Engineering)
Advanced UNIX Programming
(2013 Credit Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates :

- 1) Attempt ANY FIVE out of SEVEN questions.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right side indicate full marks.*
- 4) Assume suitable data, if necessary.*
- 5) Use of Calculator is allowed.*

Q1) a) Explain in brief process utilities and disk utilities. **[5]**

b) Write a short note on networking commands. **[5]**

Q2) a) Explain five ways of process termination. **[5]**

b) Explain vfork(), fork(), functions in brief. **[5]**

Q3) a) Explain in brief I/O multiplexing. **[5]**

b) Write a short note on Memory Mapped I/O. **[5]**

Q4) a) Explain FIFOs and message queues in brief. **[5]**

b) Explain in brief pipes characteristics and reading and writing from a pipe. **[5]**

Q5) a) Write a short note on Multithreading and prethreading. **[5]**

b) Explain in brief stubs and skeletons. **[5]**

P.T.O.

Q6) a) Write a short note on Routing socket and Raw socket. [5]

b) Design of a simple client and server based echo server with threading. [5]

Q7) Write short notes on any two of the following : [10]

a) exit(), wait(), waitpid() functions

b) msgget(), msgsnd(), msgrcv() functions

c) Memory Coherency

