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B.Tech. – VIEP – COMPUTER SCIENCE AND ENGINEERING (BTCSVI)
Term-End Examination
December, 2015

BICS-026 : UNIX INTERNALS AND SHELL PROGRAMMING

Time : 3 hours   *Maximum Marks : 70*

Note : *Answer any **seven** questions. All questions carry equal marks.*

1. Explain C shell and Bourne shell with their salient features.   *10*

2. Explain the system BOOT and INIT process.   *10*

3. Explain mounting and unmounting the file systems.   *10*

4. Write shell scripts for the following :   *5+5*

    (a) To find the factorial of a given number.

    (b) To delete all the files of size 10 to 20 kilobytes from current working directory.

5. Explain the algorithm for assigning new nodes.   *10*

6. Discuss the following : *5+5*

  (a) Process Termination

  (b) Changing the size of the process

7. What is Paging ? Explain how the addresses are mapped in paging, with the help of a block diagram. *10*

8. Briefly explain the allocation of disk blocks. *10*

9. Explain the structure of a regular file with a neat sketch. *10*

10. Explain the following : *5+5*

  (a) Distributed UNIX System

  (b) Network Communication Socket