B.Tech. COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

Term-End Examination

June, 2013

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 the Architecture of the UNIX Operating System.   **10**

2. Write down the advantages and disadvantages of the buffer cache.   **10**

3. Explain the Algorithm for Assigning new nodes.   **10**

4. Explain the "Open" operation and algorithm in file systems.   **10**

5. Explain mounting and unmounting the file system.   **10**

6. What are the process states and transitions ? Explain with neat sketch. **10**

7. How the process creation is performed ? Explain with example. **10**

8. Discuss the following :

   (a) Process Termination **5**

   (b) Changing the size of the process **5**

9. Explain C shell and Bourne shell ? **10**

10. Explain *any two* of the following : **5x2=10**

    (a) INIT Process

    (b) Network Communication Socket

    (c) Distributed UNIX System

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