## **B.Tech. Computer Science & Engineering**

## **BCSC0803: OPERATING SYSTEMS LAB**

**Objective:** The lab aims to develop understanding the operation of UNIX operating system.

Credits:1 L-T-P-J:0-0-2-0

Module No.	Content	Teaching Hours
I, II and	<ul> <li>Implement the following basic commands (with options) used in UNIX/LINUX OS.</li> <li>Write and implement the basic vi editor commands.</li> <li>Shell scripts that use simple commands.</li> <li>Decision based Shell scripts.</li> <li>Shell scripts related to strings.</li> <li>Shell scripts using pipes.</li> <li>Shell scripts with loop statements.</li> <li>Demonstration and solution for race condition.</li> <li>Demonstration and use of System Calls.</li> <li>Implement the basics of IPC in UNIX.</li> </ul>	24

## **Reference Books:**

- SibsankarHalder and Alex A Aravind (2009)," Operating Systems", 6th Edition, Pearson Education.
- Harvey M Dietel (2002), "An Introduction to Operating System", 2nd Edition, Pearson Education.
- D M Dhamdhere (2006), "Operating Systems: A Concept Based Approach", 2nd Edition.
- M. J. Bach. (1986), "Design of the Unix Operating System", PHI.

**Outcome:** After completion of course, the student will be able to:

- Various operations on UNIX operating systems.
- Understand the working of systems calls.
- Understand and solve message passing in Unix operating system.