A screenshot of a cell phone

Description generated with very high confidence

**Course Plan**

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| **Department :** | Data Science & Computer Applications |
| **Course Name & code :** | Network Lab & MCA 5163 |
| **Semester & branch :** | III Semester & M.C.A. |
| **Name of the faculty :** | Vinayak M |
| **No of contact hours/week:** | 3 |

**ASSESSMENT PLAN:**

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| --- | --- |
| 1. **In Semester Assessments** | 60% |
| • | |
| 1. **End Semester Examination** | 40% |
| * Lab examination of 3 hours duration (Max. Marks: 40) | |

**Course Outcomes (COs)**

***At the end of this course, the student should be able to:***

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| --- | --- | --- | --- |
|  |  | **No. of Contact Hours** | **Program Outcomes (POs) addressed** |
| CO1: | Understand Linux Commands and System Calls | 3 | POs |
|  |
| CO2: | Implement Inter-process Communication between Processes | 12 | POs |
| CO3: | Implement Socket Programming using C and Java | 15 | POs |
| CO4: | Design application layer protocols using sockets | 3 | POs |
| CO5: | Click or tap here to enter text. |  | POs |
|  |  |  |  |

**Course Plan**

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| **L. No.** | **Topics** | **Course Outcome Addressed** |
| **L0** | Review of Basic Linux Commands | CO |
| **L1** | Review of Linux system calls:open(), close(), read(), write(), creat(), fork(), wait(). | CO1 |
| **L2** | Interprocess Commmunication using Pipes. | CO2 |
| **L3** | Interprocess Commmunication using FIFOs | CO2 |
| **L4** | Interprocess Communication using Message Queue | CO2 |
| **L5** | Interprocess Communication using Shared Memory | CO3 |
| **L6** | Socket Programming - Simple TCP | CO3 |
| **L7** | Socket Programming - Simple UDP | CO3 |
| **L8** | Socket Programming – multi client | CO3 |
| **L9** | Java Scoket Programming using TCP | CO3 |
| **L 10** | Java Scoket Programming using UDP | CO4 |
| **L11** | Java network applications | CO4 |
| **L12** | END SEMESTER EXAMINATION | CO |
| **L 13** | Click or tap here to enter text. | CO |
| **L 14** | Click or tap here to enter text. | CO |

**References:**

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| --- | --- |
| 1. | W.Richard Stevens, “UNIX Network Programming Interprocess Communications”, Volume 2, Second Edition,Pearsson Education, 2001 |
| 2. | A Rama Satish, “UNIX Programming”, Scitech Publications, 2009 |
| 3. | Douglas E Comer, David L Stevens,”Internerworking with TCP/IP-Volume III”,Pearson Education, Second Edition,2004 |
| 4. | Elliotte Rusty Harold, “ Java Network Programming-Developing Networked Applications, O’Reilly, 4th Edition, 2014 |
| 5. | Click or tap here to enter text. |
| 6. | Click or tap here to enter text. |
| 7. | Click or tap here to enter text. |

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| **Submitted by:** | Archana.H |

**(Signature of the faculty)**

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| **Date:** | 25-07-2022 |

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| **Approved by:** | Dr.Karunakar A Kotegar |

**(Signature of HOD)**

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| **Date:** | 25-07-2022 |

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