

Department of Information Science & Engineering

SEM: IV

| Sl. No. | LAB | Link |
|---------|--|---|
| 1. | Design and Analysis of Algorithms Lab [P18ISL47] | <ul style="list-style-type: none">https://www.youtube.com/channel/UCB1jU1HGf5va22ZMhtPuj9w?view_as=subscriber |
| 2. | Java Programming Lab [P18ISL48] | <ul style="list-style-type: none">https://www.youtube.com/channel/UCB1jU1HGf5va22ZMhtPuj9w?view_as=subscriber |

Subject: Networks Lab [P17ISL67]

SEM: VI

LAB Manual & Syllabus: <https://sites.google.com/view/brameshsm/2019-20-even-sem>

| Sl. No. | Experiment Name | Link |
|---------|--|---|
| 1. | Design a star topology for LAN using hub or switch or both by taking at least five nodes and analyze the statistics. | <ul style="list-style-type: none">https://youtu.be/a5-gHyIGI-4 |
| 2. | Design a mesh topology for five nodes and analyze the TCP, UDP statistics and FIFO queuing mechanism. | <ul style="list-style-type: none">https://youtu.be/UCx0dVtq4IA |
| 3. | Design a scenario to integrate wired network and wireless network using Wi-Fi infrastructure mode and analyze the statistics. | <ul style="list-style-type: none">https://youtu.be/F-43NU-ooQg |
| 4. | Using TCP/IP sockets, write a client-server program to make client sending the file name and the server to send back the contents of the requested file, if present. | <ul style="list-style-type: none">https://youtu.be/RYoWtY5SZw4 |
| 5. | Implement the above program using FIFOs as IPC channels. | <ul style="list-style-type: none">https://youtu.be/RYoWtY5SZw4 |

Subject: Internet of Things Lab [P17ISL68]

SEM: VI

| Sl. No. | Experiment Name | Link |
|---------|--|---|
| 1. | 4. Develop an application using RasberyPi to detect an object using IR sensor. | <ul style="list-style-type: none">• https://drive.google.com/drive/folders/1tCTDh4b4O75WtkCFQ8wugcZrARfrZOMA?usp=sharing• https://drive.google.com/file/d/19Xv_UEGDa8gvhoA9IGja6R8Oh7DZMzEg/view?usp=sharing• https://drive.google.com/file/d/18wzM3b - mrfzvcbopN8RdtJhaYvkc8/view?usp=sharing |
| 2. | 5 a. Write a Program to interface temperature sensor to Arduino UNO and read the values of temperature and humidity in the given environment and turn On the LED if temperature value met the threshold value. | <ul style="list-style-type: none">• https://drive.google.com/drive/folders/1yBzKHw8e2H98DPVtDPjzE_GcgZLxYKgp?usp=sharing |
| | 5 b. Using XCTU software, connect two different motes wirelessly and establish a duplex communication. | <ul style="list-style-type: none">• https://drive.google.com/drive/folders/1ru3hdj4RgOdRY9UAOavoNYyUPw4cm3t5?usp=sharing |
| 3. | 6. Write a Program to interface LPG sensor to Arduino UNO and read the values of a sensor in the given environment and turn on the buzzer if petroleum gas is detected value. | <ul style="list-style-type: none">• https://drive.google.com/drive/folders/1qP7CILM112qv_6iqe9qiLNm8FzielYoP?usp=sharing• https://drive.google.com/file/d/1kRMbDI1Ve6HskJRXmg61DcOiM4Lx_Ltn/view?usp=sharing |

Theory: <https://drive.google.com/drive/folders/1yLFXEp5RQbTdsMo20X5HihwqvHz2mU4n?usp=sharing>