

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

## DEPARTMENT OF INFORMATION TECHNOLOGY

### IV Year-I Sem

### IoT Lab

S. No	Lab Experiments
<b>Week 1 &amp; 2:</b>	<ol style="list-style-type: none"><li>1. Setting up your Raspberry Pi. Installation of software.</li><li>2. Introduction to Raspberry Pi &amp; Sensors<ol style="list-style-type: none"><li>a. Temperature Sensors</li><li>b. Proximity Sensors</li><li>c. Pressure Sensors</li></ol></li><li>3. Introduction to Sensors &amp; Actuators<ol style="list-style-type: none"><li>a. Humidity Sensors</li><li>b. Accelerometer &amp; Gyroscope</li><li>c. Actuators Ex: Motors</li></ol></li></ol>
<b>Week 3:</b>	<ol style="list-style-type: none"><li>4. Introduction to IoT with The Thing Box &amp; IFTTT</li></ol>
<b>Week 4 &amp; 5:</b>	<ol style="list-style-type: none"><li>5. Build your own Raspberry Pi Web Server</li></ol>
<b>Week 6:</b>	<ol style="list-style-type: none"><li>6. Build a Web-App: Blinking an LED over Internet</li></ol>
<b>Week 7&amp;8:</b>	<ol style="list-style-type: none"><li>7. Live Temperature and Humidity Monitoring over Internet</li></ol>
<b>Week 9&amp;10:</b>	<ol style="list-style-type: none"><li>8. Introduction to Open Source Cloud Platforms for IoT: OpenIoT, ThingSpeak, thinger.io, Google Cloud Platform.</li></ol>
<b>Week 11&amp; 12:</b>	<ol style="list-style-type: none"><li>9. IoT based Home Security System with Email</li></ol>