

**Government Polytechnic Sector-26 Panchkula**

Name of Faculty: Guest Faculty

Discipline: Mechanical/Electrical/Computer Engg.

Subject: Internet of Things and Artificial Intelligence

Lesson Plan Duration: 2020-21

Week	Practical		
	Practical Day	Topic	Group
<b>Week 1</b>	Day 1	Introduction to Internet of Things	G-I
	Day 2	Introduction to Internet of Things	G-II
<b>Week 2</b>	Day 3	Applications of Internet	G-I
	Day 4	Applications of Internet	G-II
<b>Week 3</b>	Day 5	Architechure and Protocols of Internet of Things	G-I
	Day 6	Architechure and Protocols of Internet of Things	G-II
<b>Week 4</b>	Day 7	Physical Design/Logical Design of Internet of Things	G-I
	Day 8	Physical Design/Logical Design of Internet of Things	G-II
<b>Week 5</b>	Day 9	Functional blocks of Internet of things, Commnication Model	G-I
	Day 10	Functional blocks of Internet of things, Commnication Model	G-II
<b>Week 6</b>	Day 11	Basics of C language using Arduino IDE	G-I
	Day 12	Basics of C language using Arduino IDE	G-II
<b>Week 7</b>	Day 13	Understating basics of Arduino IDE	G-I
	Day 14	Understating basics of Arduino IDE	G-II
<b>Week 8</b>	Day 15	Declaring of variable, datatypes	G-I
	Day 16	Declaring of variable, datatypes	G-II
<b>Week 9</b>	Day 17	Defferent types of loop(for loop, while&do while loop)	G-I
	Day 18	Defferent types of loop(for loop, while&do while loop)	G-II
<b>Week 10</b>	Day 19	<b>1st Internal Assesment Exam</b>	
	Day 20	Defferent types of loop(for loop, while&do while loop)	G-I
<b>Week 11</b>	Day 21	Defferent types of loop(for loop, while&do while loop)	G-II
	Day 22	Using Control Statement	G-I
<b>Week 12</b>	Day 23	Using Control Statement	G-II
	Day 24	Declaring Function	G-I
<b>Week 13</b>	Day 25	Declaring Function	G-II
	Day 26	using Arduino-interfacing sensors	G-I
<b>Week 14</b>	Day 27	using Arduino-interfacing sensors	G-II
	Day 28	Interfacing Light Emitting Diode(LED)	G-I
<b>Week 15</b>	Day 29	Interfacing Light Emitting Diode(LED)	G-II
	Day 30	Interfacing LED Blinking	G-I
<b>Week 16</b>	Day 31	Interfacing LED Blinking	G-II
	Day 32	Interfacing button and LED, LED blinking when button is pressed	G-I
<b>Week 17</b>	Day 33	<b>2nd Internal Assesment Exam</b>	
	Day 34	Interfacing button and LED, LED blinking when button is pressed	G-II
<b>Week 18</b>	Day 35	Interfacing button and LED, LED blinking when button is pressed	G-I
	Day 36	Interfacing button and LED, LED blinking when button is pressed	G-II
	Day 37	Interfacing Light Dependent Resistor(LDR) and LED, display automatic night	G-I

<b>Week 19</b>	Day 38	Interfacing Light Dependent Resistor(LDR) and LED, display automatic night	G-II
<b>Week 20</b>	Day 39	Interfacing Light Dependent Resistor(LDR) and LED, display automatic night	G-I
	Day 40	Interfacing Light Dependent Resistor(LDR) and LED, display automatic night	G-II
<b>Week 21</b>	Day 41	Interfacing Temperature Sensor(LM35) and/or humidity sensor (e.g. DHT11)	G-I
	Day 42	Interfacing Temperature Sensor(LM35) and/or humidity sensor (e.g. DHT11)	G-II
<b>Week 22</b>	Day 43	Interfacing Temperature Sensor(LM35) and/or humidity sensor (e.g. DHT11)	G-I
	Day 44	Interfacing Temperature Sensor(LM35) and/or humidity sensor (e.g. DHT11)	G-II
<b>Week 23</b>	Day 45	Interfacing Liquid Crystal Display(LCD) – display data generated by sensor on	G-I
	Day 46	Interfacing Liquid Crystal Display(LCD) – display data generated by sensor on	G-II
<b>Week 24</b>	Day 47	Interfacing Liquid Crystal Display(LCD) – display data generated by sensor on	G-I
	Day 48	Interfacing Liquid Crystal Display(LCD) – display data generated by sensor on	G-II
<b>Week 25</b>	Day 49	nterfacing Air Quality Sensor-pollution	G-I
	Day 50	nterfacing Air Quality Sensor-pollution	G-II
<b>Week 26</b>	Day 51	display data on LCD , switch on LED when data sensed is higher than specified value.	G-I
	Day 52	display data on LCD , switch on LED when data sensed is higher than specified value.	G-II
<b>Week 27</b>	Day 53	Interfacing Bluetooth module (e.g. HC05)	G-I
	Day 54	Interfacing Bluetooth module (e.g. HC05)	G-II
<b>Week 28</b>	Day 55	receiving data from mobile phone on Arduino and display on LCD	G-I
	Day 56	receiving data from mobile phone on Arduino and display on LCD	G-II
<b>Week 29</b>	Day 57	Interfacing Relay module to demonstrate Bluetooth	G-I
	Day 58	Interfacing Relay module to demonstrate Bluetooth	G-II
<b>Week 30</b>	Day 59	home automation application. (using Bluetooth and relay)	G-I
	Day 60	home automation application. (using Bluetooth and relay)	G-II
<b>Week 31</b>	Day 61	Introduction to Artificial Intelligence	G-I
	Day 62	Introduction to Artificial Intelligence	G-II
<b>Week 32</b>	Day 63	Machine Learning (ML), Deep Learning (DL)	G-I
	Day 64	Machine Learning (ML), Deep Learning (DL)	G-II
<b>Week 33</b>	Day 65	Role of AI in IoT and its applications	G-I
	Day 66	Role of AI in IoT and its applications	G-II
<b>Week 34</b>	Day 67	Managing and Analysing data generated by IoT devices	G-I
	Day 68	Managing and Analysing data generated by IoT devices	G-II
<b>Week 35</b>	Day 69	Understanding excel for analysing data	G-I
	Day 70	Understanding excel for analysing data	G-II