

Government Polytechnic Vaishali

(Department of Electronics Engineering)

Lecture Plan

Name of the Faculty		NITESH KUMAR SINGH			
Email id and Mobile number		nitesh.singh2230@gmail.com , 8002708700			
Semester/Branch		3 rd / Electronics Engg.			
Subject Name/Subject (Code)		Electronics Drawing and Drafting/1621304			
Lecture/Week		3 Periods/Week + 1 Term Work = 6 hrs per week			
Theory					
Units	Week	Lecture Day	Topics	Methods of Teaching	Remarks
1 Symbols	1	1	Basics of Active and Passive Devices	PDF/Video/Hand written notes	
		2	Symbols and references of commonly used active devices.	PDF/Video/Hand written notes	
		3	Symbols and references of commonly used active devices contd.	PDF/Video/Hand written notes	
		4	Symbols and references of commonly used passive devices	PDF/Video/Hand written notes	
		5	Symbols and references of commonly used passive devices contd.	PDF/Video/Hand written notes	
		6	Assignment on symbols and references of active and passive devices (2 sheets)	PDF/Google form	
2 Construction View of commonly used components and devices	2	1	Construction view of commonly used components and devices	PDF/Video/Hand written notes	
		2	Relay construction view showing all mechanical parts	PDF/Video/Hand written notes	
		3	Relay construction view showing all electrical parts	PDF/Video/Hand written notes	
		4	Microphones construction view showing all mechanical parts	PDF/Video/Hand written notes	
		5	Microphones construction view showing all electrical parts	PDF/Video/Hand written notes	
		6	Speaker construction view showing all mechanical parts	PDF/Video/Hand written notes	

	3	1	Microphones construction view showing all mechanical parts	PDF/Video/Hand written notes	
		2	Microphones construction view showing all electrical parts	PDF/Video/Hand written notes	
		3	Trimmers construction view showing all mechanical parts	PDF/Video/Hand written notes	
		4	Trimmers construction view showing all electrical parts	PDF/Video/Hand written notes	
		5	Garg Condensor construction view showing all mechanical and electrical parts	PDF/Video/Hand written notes	
		6	Assignment on construction view of commonly used components and devices	PDF/Google form	
3 Block Diagrams	4	1	Overview of Block Diagrams of Electronic Devices and Circuits	PDF/Video/Hand written notes	
		2	Block Diagrams of Analog Electronics Circuits	PDF/Video/Hand written notes	
		3	Block Diagrams of Analog Electronics Circuits contd.	PDF/Video/Hand written notes	
		4	Block Diagrams of Digital Electronics Circuits	PDF/Video/Hand written notes	
		5	Block Diagrams of Digital Electronics Circuits contd.	PDF/Video/Hand written notes	
		6	System diagrams of Electronics communication circuits	PDF/Video/Hand written notes	
	5	1	System diagrams of Electronics communication circuits contd.	PDF/Video/Hand written notes	
		2	Sub- System diagrams of Electronics Circuits	PDF/Video/Hand written notes	
		3	Sub- System diagrams of Electronics Circuits contd.	PDF/Video/Hand written notes	
		4	General Layout of AM Transmitter	PDF/Video/Hand written notes	
		5	General Layout of AM Receiver	PDF/Video/Hand written notes	
		6	General Layout of FM Transmitter	PDF/Video/Hand written notes	
	6	1	General Layout of FM Receiver	PDF/Video/Hand written notes	
		2	General Layout of TV Transmitter	PDF/Video/Hand written notes	
		3	General Layout of TV Transmitter	PDF/Video/Hand written notes	

		4	General layout of Computer	PDF/Video/Hand written notes	
		5	General layout of other electronic devices e.g Calculator	PDF/Video/Hand written notes	
		6	Assignment on Block Diagrams	PDF/Google form	
4 Circuit Diagrams	7	1	Circuit Diagram of Rectifier Circuit showing interconnections	PDF/Video/Hand written notes	
		2	Circuit Diagram of Transistor biasing circuit	PDF/Video/Hand written notes	
		3	Circuit Diagram of BJT as amplifier	PDF/Video/Hand written notes	
		4	Circuit Diagram of FET amplifier	PDF/Video/Hand written notes	
		5	Circuit Diagram of Operational Amplifier	PDF/Video/Hand written notes	
		6	Assignment on Circuits Diagrams	PDF/Google form	
	8	1	Circuit Diagram of Monostable Circuit using BJT	PDF/Video/Hand written notes	
		2	Circuit Diagram of Astable Circuit using BJT	PDF/Video/Hand written notes	
		3	Filter and Attenuator circuit diagram	PDF/Video/Hand written notes	
		4	Oscillator Circuit diagram	PDF/Video/Hand written notes	
		5	Modulator Circuit diagram	PDF/Video/Hand written notes	
		6	Assignment on Circuits Diagrams	PDF/Google form	
	9	1	Regulated DC power supply of non-linear wave shaping	PDF/Video/Hand written notes	
		2	Detector Circuit diagram	PDF/Video/Hand written notes	
		3	Wave shape generator	PDF/Video/Hand written notes	
		4	Electric Machine and DC generator	PDF/Video/Hand written notes	
		5	Inverter and converter circuit diagram	PDF/Video/Hand written notes	
		6	Assignment on Circuits Diagrams	PDF/Google form	
10	1	Logic gate, Logic family, D/A converter, A/D converter circuit diagram	PDF/Video/Hand written notes		
	2	Logic gate, Logic family, D/A converter, A/D converter circuit diagram contd..	PDF/Video/Hand written notes		

5 Logic Diagrams		3	Elements of logic diagram			
		4	Symbols of logic diagram			
		5	Line work and labelling of logic gates	PDF/Video/Hand written notes		
		6	Logic diagram of Shift Registers (SISO,SIPO,PISO,PIPO)	PDF/Video/Hand written notes		
	11	1	Logic diagram of Counters (Asynchronous and Synchronous)	PDF/Video/Hand written notes		
		2	Logic diagram of Multiplexers	PDF/Video/Hand written notes		
		3	Logic diagram of De-Multiplexers	PDF/Video/Hand written notes		
		4	Logic diagram of adder circuit	PDF/Video/Hand written notes		
		5	Logic diagram of subtractor circuit	PDF/Video/Hand written notes		
		6	Logic diagram of encoder circuit	PDF/Video/Hand written notes		
	12	1	Logic diagram of decoder circuit	PDF/Video/Hand written notes		
		2	Assignment on Circuits Diagrams	PDF/Google form		
		3	Truth Tables of Combinational Circuits	PDF/Video/Hand written notes		
		4	Truth Tables of Combinational Circuits contd...	PDF/Video/Hand written notes		
		5	Truth Tables of Sequential Circuits	PDF/Video/Hand written notes		
		6	Truth Tables of Sequential Circuits contd...	PDF/Video/Hand written notes		
	Unit 6 Outline Drawing	13	1	Basics of Outline Drawing	PDF/Video/Hand written notes	
			2	Outlining and Pin configuration of ICs	PDF/Video/Hand written notes	
3			Outlining and Pin configuration of ICs contd..	PDF/Video/Hand written notes		
4			Outlining and Pin configuration of Semiconductor devices	PDF/Video/Hand written notes		
5			Outlining and Pin configuration of Semiconductor devices	PDF/Video/Hand written notes		
6			Electron Toys	PDF/Video/Hand written notes		

	14	1	Speakers	PDF/Video/Hand written notes	
		2	Parts of Electric Machine and Winding of Stator and Rotor	PDF/Video/Hand written notes	
		3	Parts of Electric Machine and Winding of Stator and Rotor contd.	PDF/Video/Hand written notes	
		4	Assignment on Outline Drawing	PDF/Google form	
		5	Construction view of Relay Circuit, NPN Relay, Switch Circuit and PNP Relay Switch Circuit	PDF/Video/Hand written notes	
		6	Sketch of NPN Darlington Relay switch circuit	PDF/Video/Hand written notes	
Unit 7 Sketch and Pictorial views	15	1	Sketches of commonly used Electronic Devices and mechanical parts contd...	PDF/Video/Hand written notes	
		2	Pictorial views of commonly used Electronic Devices e.g Microphone	PDF/Video/Hand written notes	
		3	Pictorial views of commonly used Electronic Devices e.g. Moving coil microphone, crystal microphone	PDF/Video/Hand written notes	
		4	Assignment on sketch and pictorial views	PDF/Google form	
		5	Basics of Wiring Diagram	PDF/Video/Hand written notes	
		6	Wiring diagram of commonly used circuits	PDF/Video/Hand written notes	
Unit 8 Wiring Diagram	16	1	Wiring diagram of commonly used circuits contd...	PDF/Video/Hand written notes	
		2	Preparation of layouts	PDF/Video/Hand written notes	
		3	Preparation of layouts contd...	PDF/Video/Hand written notes	
		4	Wire Folds	PDF/Video/Hand written notes	
		5	Wire Folds contd...	PDF/Video/Hand written notes	
		6	Wire Folds contd...	PDF/Video/Hand written notes	
	17	1	Representation of Joints in different ways	PDF/Video/Hand written notes	
		2	Representation of Joints in different ways contd...	PDF/Video/Hand written notes	
		3	Representation of Joints in different ways contd...	PDF/Video/Hand written notes	
		4	Representation of Joints in different ways contd...	PDF/Video/Hand written notes	

		5	Assignment on wiring diagram	PDF/Google form	
		6	Introduction to PCB drawing	PDF/Video/Hand written notes	
Unit 9 PCB drawing	18	1	Advantages of PCB drawing	PDF/Video/Hand written notes	
		2	Drawing documents for PCB	PDF/Video/Hand written notes	
		3	Drawing documents for PCB contd...	PDF/Video/Hand written notes	
		4	Schematic Diagram using PCB	PDF/Video/Hand written notes	
		5	Schematic Diagram using PCB contd...	PDF/Video/Hand written notes	
		6	Art work	PDF/Video/Hand written notes	
	19	1	Art work contd...	PDF/Video/Hand written notes	
		2	Stencil Drawing	PDF/Video/Hand written notes	
		3	Stencil Drawing contd...	PDF/Video/Hand written notes	
		4	Marking Assembly Drawing (Pictorial and Part List)	PDF/Video/Hand written notes	
		5	Marking Assembly Drawing (Pictorial and Part List)	PDF/Video/Hand written notes	
		6	Assignment on PCB drawing	PDF/Google form	
Unit 10 Nomography	20	1	Introduction to Nomography	PDF/Video/Hand written notes	
		2	Different parameters of Nomography	PDF/Video/Hand written notes	
		3	Measurements used in Nomography	PDF/Video/Hand written notes	
		4	Nomography of differet electrical variations in realistic circuits	PDF/Video/Hand written notes	
		5	Nomography of differet electrical variations in realistic circuits contd..	PDF/Video/Hand written notes	
		6	Assignment on Nomography	PDF/Google form	
Total		120			