Lesson Plan
Session: 2022-23
Odd Semester

Name of the Assistant Professor: Ms. Neha Dobriyal
Department: Electronics & IT
Lesson Plan: 17 Weeks (September-December 2022)

WEEK	DATE	Class: B.Sc(Hons)-IT Sem: I Paper: BSIT-105 Subject: Electronic Communication-I Days: M-T-W (3 days)	Class: B.Sc(Hons)-IT Sem: III Paper: BSIT-304 Subject: Microprocessor Architecture and Programming-I Days: M-T-W (3 days)	Class: B.Sc(Hons)-IT Sem: V Paper: BSIT-505 Subject: Microprocessor Architecture and Programming-III Days: M-T-W (3 days)	Class: B.SC -I Sem: I Paper: II Subject: Electronics Devices and Circuits Days: T-F-S (3 days)	Class: B.SC -I Sem: III Paper: I Subject: OpAmp and Linear Integrated Circuits Days: T-F-S (3 days)
I	01-09-2022	-	-	-	Introduction To Subject And University Scheme	Introduction To Subject And University Scheme
	02-09-2022	-	-	-	Introduction To Materials, Energy Band Diagrams	Basics Of Integrated Circuit Technology An Types Of ICS
	03-09-2022	-	-	-	Intrinsic And Extrinsic Semiconductors	
	04-09-2022	**SUNDAY**				
	05-09-2022	Introduction To Subject, Discussion On Syllabus And Scheme.	Introduction To Subject, Discussion On Syllabus And Scheme.	Introduction To 8086 Microprocessor, Concept Of Even And Odd Memory,		

II	06-09-2022	Communication Model,	Simple As Possible Computer (Sap-1) Introduction	Semiconductor Memory Interfacing		
	07-09-2022	Modulation Its Need And Types	Architecture Of SAP- 1	Examples Of Static RAM Interfacing		
	08-09-2022				Energy Band Diagrams, Drift And Diffusion Currents	Monolithic Fabrication Technique
	09-09-2022				Junction Diode And Its Characteristics	Basics Of Operational Amplifier, Op-Amp Pin Diagram
	10-09-2022				Space Charge Capacitance And Diffusion Capacitance	Double Ended Differential Amplifier
	11-09-2022	**SUNDAY**				
III	12-09-2022	Amplitude Modulation, Derivation	Architecture Of SAP-1	Dynamic RAM Interfacing	-	-
	13-09-2022	AM Spectrum,, Modulation Index With Numericals	Instruction Set	I/O Interfacing	-	-
	14-09-2022	Power And Current Content In AM	Programming Of SAP-1	Introduction To 8255	-	-

	Date					
	15-09-2022	-	-	-	Zener Diode And Its Characteristics	Differential Gain, Common Mode Gain
	16-09-2022	-	-	-	Voltage Regulation Using Zener Diode	CMRR, Slew Rate, And Other Parameters
	17-09-2022	-	-	-	Schottky Diode	Ideal Opamp, And Its Transfer Characteristics
	18-09-2022	**SUNDAY**				
IV	19-09-2022	Demodulation Of AM	Fetch Cycle, Execution Cycle	CWR		
	20-09-2022	DSB-SC, SSB-SC And Their Comparison	SAP-II Architecture	Keybord Interfacing		
	21-09-2022	Frequency Modulation	Memory Reference Instructions	Interfacing Examples		
	22-09-2022				Clipper Circuits: Series And Shunt , Biased Clippers **Assignment-1**	Feedback Concept In Amplifier
	23-09-2022	**HOLIDAY**				
	24-09-2022				Clamping Circuit: Positive And Negative Clampers	Inverting And Non Inverting Configuration Open And Closed Loop Both

	25-09-2022	**SUNDAY**			
V	26-09-2022	**HOLIDAY**			
	27-09-2022	Effect Of Modulation Index, Frequency Deviation	Register Instructions, Jump And Call Instructions	I/O Mapped And Memory Mapped Scheme		**Assignment-1**
	28-09-2022	Demodulation Of FM	Logic Instructions	Introduction To A/D		Summing And Difference Amplifier
	29-09-2022	-	-	-	Half Wave Rectifiers: Basic Concept , Working	Error Sources In Op Amp: Off Set Voltage, Bias Current
	30-09-2022	-	-	-	Calculation Of Various Parameters Of Half Wave Rectifier	Input Bias Current, Summing Amplifier As Average Amplifier And Divider
	01-10-2022	**NON TEACHING**				
	02-10-2022	**SUNDAY**				
VI	03-10-2022	Phase Modulation	**Assignment-1**	D/A Convertor And Its IC		
	04-10-2022	Relationship Between FM & PM, Narrow Band Wideband FM	SAP-III Programming Model	Interfacing A/D Data Converters,		
	05-10-2022	**Holiday**				

	Date					
	06-10-2022				Full Wave Rectifiers: Basic Concept , Working	Multiplier And Divisor Using Op Amp
	07-10-2022				Calculation Of Various Parameters Of Full Wave Rectifier	Effect Of Error Sources On Inverting Configuration
	08-10-2022				Bridge Rectifier	Effect Of Error Sources On Non-Inverting Configuration
	09-10-2022	**SUNDAY**				
VII	10-10-2022	Fourier Theorem, Fourier Analysis	MOV & MVI, Arithmetic Instructions, Increment, Decrement	Interfacing D/A Converters, Various Example		
	11-10-2022	**Assignment-I**	Rotates, Logic Instructions	Interconnection Topologies		
	12-10-2022	Introduction To Pulse Modulation System	Arithmetic And Logical Immediates Instructions	Software Aspects Of Multimicroprocessor Systems		
	13-10-2022				Filter Circuits: L, C(Calculation Of Ripple Factor)	Integrating And Differentiating Circuit Using Op. Amp

	Date					
	14-10-2022				**Class Test**	Active Filters: Ist Order LPF
	15-10-2022				LC Filter, Calculation Of Ripple Factor	Active Filters: Ist Order HPF
	16-10-2022	SUNDAY				
VIII	17-10-2022	Sampling Theorem For Low Pass And Band Pass Signals	Jump Instructions, Extended Register Instructions	Numeric Processor 8087		
	18-10-2022	Different Types Of Sampling,	Indirect Instructions, Stack Instructions	Numeric Processor 8087		
	19-10-2022	PAM, Generation Method	**Class Test**	**Assignment-I**		
	20-10-2022				Voltage Multiplier Circuit	Active Filters: Ist Order Band Pass Filter
	21-10-2022				**Assignment-II**	Numericals
	22-10-2022				Introduction To Transistors And Its Basics	Crystal Growth CZ Method
	23-10-2022	SUNDAY				
	24-10-2022	DIWALI BREAK				
	25-10-2022					
	26-10-2022					

IX	27-10-2022				Potential Curves In Unbiased And Biased Transistor	Epitaxial Growth
	28-10-2022				Transistor Current Components	**Assignment 2**
	29-10-2022				Early Effect, Transistor As An Amplifier	Oxidation Techniques
	30-10-2022	**SUNDAY**				
X	31-10-2022	Numerical on Sampling	8085 Microprocessor Block diagram	**Class Test**		
	01-11-2022	**HOLIDAY**				
	02-11-2022	Quantization Of Signals	Pinout Diagram	Introduction To Stack, Stack Structure Of 8086		
	03-11-2022				Static Characteristics Of CE Configuration Active, Cut Off And Regions.	Masking. Photolithography Technique
	04-11-2022				Static Characteristics Of CC Configuration Saturation Region	Etching And Its Types

	05-11-2022				Transistor Current Gains (Alpha, Beta, And Gama) And Comparison Of Three Configurations	NPN And PNP Transistor Fabrication
	06-11-2022	**SUNDAY**				
XI	**07-11-2022**	Quantization errors	Instruction set of 8085	Interrupts And Interrupts Service Routines		
	08-11-2022	**HOLIDAY**				
	09-11-2022		Instruction Set Of 8085	Interrupt Programming, Passing Parameters To Procedures		
	10-11-2022				Ebers-Moll Model Of Transistor	Monolithic Diodes Configurations
	11-11-2022				Hybrid-Model Of Transistor	Monolithic Integrated Resistors
	12-11-2022				Emitter Follower	Principle Of Voltage Regulation
	13-11-2022	**SUNDAY**				

	14-11-2022	**Class Test**	Fetching And Executing, Instructions Of 8085	Handling Programs Of Size More Than 64k, Macros		
XII	15-11-2022	The Pcm System	Fetch Execute Overlap	Timings And Delays		
	16-11-2022	Bandwidth Requirements Of PCM	Instruction Word Size, Addressing Modes	Timings And Delays		
	17-11-2022				Calculation Of Transistor Amplifier Parameters Using H-Model	Zener Diode As Voltage Regulation
	18-11-2022				Millers Theorem	BJT Shunt And Seires Regulation
	19-11-2022				Dual Of Millers Theorem	BJT Shunt And Seires Regulation
	20-11-2022	**SUNDAY**				
XIII	21-11-2022	Noise In PCM	**Assignment-2**	Salient Features 80286		
	22-11-2022	Companding and Its Need	**Revision Of Unit-3**	Salient Features 80386		
	23-11-2022	DPCM	Introduction Of Interrupts	Salient Features 80586		
	24-11-2022				**Sessional Exam**	Power Supply Regulation Using Op Amp

	Date					
	25-11-2022				Revision	Power Supply Regulation Using Op Amp
	26-11-2022				Revision	Load Regulation Concept
	27-11-2022	**SUNDAY**				
XIV	28-11-2022	Delta Modulation System	The 8085 Interrupt Circuit,	**Assignment-Ii**		
	29-11-2022	Noise In Delta Modulation System	8085 Vectored Interrupts	Salient Features Of Pentium 4		
	30-11-2022	Comparison Of PCM & DM System	Interrupt Instructions	Salient Features Of Pentium 4		
	01-12-2022					Short Circuit Protection Circuit
	02-12-2022					Short Circuit Protection Circuit
	03-12-2022					Current Regulation Using Op Amp
	04-12-2022	**SUNDAY**				
XV	05-12-2022	**Assignment-II**	**Sessional Exam**	Introduction RISC Processor		
	06-12-2022	Elements Of Digital Communication	Restart Instructions	Design Issue Of RISC		
	07-12-2022	Analysis & Design Of Communication System	Concept Of DMA	Feature Of RISC Processor		

	08-12-2022					Current Regulation Using Op Amp
	09-12-2022					Three Terminal IC Regulator 78xx, 79xx
	10-12-2022					Three Terminal IC Regulator 78xx, 79xx
	11-12-2022	**SUNDAY**				
XVI	**12-12-2022**	Bit Rate, Baud Rate, Transmission Rate	**Revision**	**Revision**		
	13-12-2022	Bandwidth Requirement, Ec Transmission Errors	**Revision**	**Revision**		
	14-12-2022	Echo Suppressor, Echo Canceller, Characteristics Of Digital Communication.	**Revision**	**Sessional Exam**		
	15-12-2022					Three Terminal IC Regulator 78xx, 79xx
	16-12-2022					Boosted Power Supply

	17-12-2022					Sessional Exam
	18-12-2022	**SUNDAY**				
XVII	19-12-2022	**Sessional Exam**	**Previous Year Question Papers**	**Previous Year Question Papers**		
	20-12-2022	**Revision**	**Previous Year Question Papers**	**Previous Year Question Papers**		
	21-12-2022	**Revision**	**Previous Year Question Papers**	**Previous Year Question Papers**		
	22-12-2022	-		-	-	**Revision**
	23-12-2022	-		-	-	**Sessional Exam**
	24-12-2022	-		-	-	Doubt Session of All Units