Lesson Plan

	Discipline: ETC	Semester-5th Winter2023	NAME OF THE FACULTY:Payal Bindia Parida(PTGF, ETC)
Sl. No.	Subject- Th.1.(ENTREPRENEURSHIP and MANAGEMENT &	No. Of Days/Week class alloted:04	Semester From date: 01.08.2023 To date: 30.11.2023 No of weeks: 17
	Weeks/Months	Class Day	Topic
1	1st week Aug to 5th week Aug	1st	1. Entrepreneurship Concept /Meaning of Entrepreneurship.
		2nd	Need of Entrepreneurship Characteristics, Qualities and Types of entrepreneur, Functions .
		3rd	Barriers in entrepreneurship.
		4th	Entrepreneurs vrs. Manager.
2	2nd week 7th Aug to 12th Aug	1st	Forms of Business Ownership: Sole proprietorship, partnership forms and others.
		2nd	Types of Industries, Concept of Start-ups Entrepreneurial support agencies at National, State, District Level(Sources): DIC, NSIC,OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
		3rd	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks.
		4th	2. Market Survey and Opportunity Identification (Business Planning).
3	3rd Week 14th aug to 19th Aug	1st	Business Planning
		2nd	SSI, Ancillary Units, Tiny Units, Service sector Units.
		3rd	Time schedule Plan, Agencies to be contacted for Project Implementation Assessment of Demand and supply and Potential areas of Growth
		4th	Identifying Business Opportunity.
4	4th week 21th Aug to 26th Aug	1st	Final Product selection.
		2nd	3. Project report Preparation Preliminary project report .
		3rd	Detailed project report, Techno economic Feasibility .
		4th	Project Viability.
5	5th week 28th Aug to 2nd Sept	1st	4. Management Principles Definitions of management.
		2nd	Principles of management .
		3rd	Functions of management (planning, organising, staffing, directing and controlling etc.

		4th	⍰ Level of Management in an Organisation.
6	1st week 4th Sept to 9th sept	1st	5. Functional Areas of Management.
		3rd	a) Production management ⍰ Functions, Activities.
		3rd	⍰ Productivity ⍰ Quality contro.
		4th	⍰ Production Planning and control.
7	2nd week 11th sept to 16th sept.	1st	b) Inventory Management.
		2nd	⍰ Need for Inventory managemen.
		3rd	⍰ Models/Techniques of Inventory management.
		4th	c) Financial Management ⍰ Functions of Financial management.
8	3rd week 18th sept. to 23rd sept	1st	⍰ Management of Working capital.
		2nd	⍰ Costing (only concept)
		3rd	⍰ Break even Analysis ⍰ Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts).
		4th	d) Marketing Management.
9	4th week 25th Sept to 30th sept	1st	⍰ Concept of Marketing and Marketing Management.
		2nd	⍰ Marketing Techniques (only concepts).
		3rd	⍰ Concept of 4P s (Price, Place, Product, Promotion).
		4th	⍰ Concept of 4P s (Price, Place, Product, Promotion).
10	1st week 02nd oct. to 07th oct	1st	⍰ Functions of Personnel Management.
		2nd	⍰ Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages.
		3rd	6. Leadership and Motivation.
		4th	a) Leadership
11	2nd week 9th oct. to 14th oct	1st	⍰ Definition and Need/Importance.
		2nd	⍰ Qualities and functions of a leader.
		3rd	⍰ Manager Vs Leader.
		4th	⍰ Style of Leadership (Autocratic, Democratic, Participative).
12	3rd week 16th oct to 20th oct.	1st	b) Motivation .
		2nd	⍰ Definition and characteristics .
		3rd	⍰ Importance of motivation.

		4th	☐ Factors affecting motivation.
13	1st week 30th oct. to 04th Nov	1st	☐ Theories of motivation (Maslow).
		2nd	☐ Methods of Improving Motivation.
		3rd	☐ Importance of Communication in Business.
		4th	☐ Types and Barriers of Communication.
14	2nd week 6th Nov to 11th Nov	1st	7. Work Culture, TQM & Safety ☐ Human relationship and Performance in Organization.
		2nd	☐ Relations with Peers, Superiors and Subordinates .
		3rd	☐ TQM concepts: Quality Policy, Quality Management, Quality system.
		4th	☐ Accidents and Safety, Cause, preventive measures, General Safety Rules , Personal Protection Equipment(PPE).
15	3rd week 13th Nov to 18th Nov	1st	8. Legislation.
		2nd	a) Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights.
		3rd	b) Features of Factories Act 1948 with Amendment (only salient points.
		4th	c) Features of Payment of Wages Act 1936 (only salient points).
16	4th week 20th Nov to 25th Nov	1st	9. Smart Technology.
		2nd	☐ Concept of IOT, How IOT works.
		3rd	☐ Components of IOT, Characteristics of IOT, Categories of IOT.
		4th	☐ Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc..
17	5th week 27th Nov to 30th Nov	1st	☐ Theories of motivation (Maslow).
		2nd	☐ Style of Leadership (Autocratic, Democratic, Participative).
		3rd	☐ Characteristics, Qualities and Types of entrepreneur..
		4th	☐ Principles of management .

Signature of the Teacher

Lesson Plan

	Discipline: ETC	Semester-3rd Winter2023	Name of the Teachng Faculty: Payal Bindia Parida(PTGF, ETC)
Sl. No.	Subject-Th.3 DIGITAL ELECTRONICS	No. Of Days/Week class alloted:04	Semester From date: 01.08.2023 To date: 30.11.2023 No of weeks: 17
	Weeks/Months	Class Day	Topic
1	1st week Aug to 5th week Aug	1st	1.1 List different number system (Binary, Octal, Decimal, Hexadecimal & the Conversion from one number system to
		2nd	1.1 List different number system (Binary, Octal, Decimal, Hexadecimal & the Conversion from one number system to another
		3rd	1.2 Perform Arithmetic operations (Addition, Subtraction, and Multiplication& Division)
		4th	1.2 Perform Arithmetic operations (Addition, Subtraction, and Multiplication& Division)
2	2nd week 7th Aug to 12th Aug	1st	1.2 Perform Arithmetic operations (Addition, Subtraction, and Multiplication& Division)
		2nd	1.3 Dynamic characteristics& speed of instruments
		3rd	1.3 Represent the Concept of complementally numbers: 1's & 2's complementally
		4th	1.4 Define concept of Digital Code & its application & Distinguish between weighted
3	3rd Week 14th aug to 19th Aug	1st	1.5 Study Codes: definition, relevance, types(BCD,Gray,Excess-3,ASCII & EBCDIC) and applications
		2nd	1.4 Define concept of Digital Code & its application & Distinguish between weighted
		3rd	1.5 Study Codes: definition, relevance, types(BCD,Gray,Excess-3,ASCII & EBCDIC) and applications
		4th	2.1 Illustrate the Different between Analog signals & systems and Digital signals & Systems
4	4th week 21th Aug to 26th Aug	1st	2.2 Discuss the Types of logic & representation using electric signals
		2nd	2.3 Learn the Basic Logic gates (NOT, OR, AND, NAND, NOR, EX-OR & EX-NOR)-Symbol,
		3rd	2.3 Learn the Basic Logic gates (NOT, OR, AND, NAND, NOR, EX-OR & EX-NOR)-Symbol,
		4th	2.3 Learn the Basic Logic gates (NOT, OR, AND, NAND, NOR, EX-OR & EX-NOR)-Symbol,
5	5th week 28th Aug to 2nd Sept	1st	2.5 Define Universal Gates & realisation of other gate
		2nd	2.5 Define Universal Gates & realisation of other gate
		3rd	3.1 Understand Boolean: constants, variables & functions
		4th	3.1 Understand Boolean: constants, variables & functions
		1st	3.2 Comprehend the Laws & details of Boolean algebra

6	1st week 4th Sept to 9th sept	3rd	3.2 Comprehend the Laws & details of Boolean algebra
		3rd	3.3 State and prove Demorgan's Theorems & Duality theorem.
		4th	3.4 Represent Logic Expression: SOP & POS forms & conversion
7	2nd week 11th sept to 16th sept.	1st	3.5 Simplify the Logic Expression /Functions (Maximum of 4 variables): using Boolean
		2nd	3.6 What is don't care conditions &Minimization of logical expressions using K-map
		3rd	Unit-4: RESONANCE AND COUPLED CIRCUITS 4.1 Introduction to resonance circuits & Resonance tuned circuit,
		4th	3.7 Realisation of simplified logic expression using gate
8	3rd week 18th sept. to 23rd sept	1st	4.1 Define a Combinational Circuit and explain with examples 4.2 Arithmetic Circuits (Binary) a) Realise function, functional expression, logic circuit, gate l
		2nd	4.4 Parallel Resonance (RL, RC& RLC)& derive the expression
		3rd	b) Explain Serial & Parallel Adder & application c) Working of 4 bit parallel adders with logic cir
		4th	) Construct 2 bit Magnitude Comparator: logic expression, truth table, gate level circuit
9	4th week 25th Sept to 30th sept	1st	4.3 Discuss Decoder (2:4)& Encoder(8:3 Octal to Binary): definition, relevance, gate level of circuit Logic circuit truth table
		2nd	4.4 Explain the working of BCD to Seven Segment Decod
		3rd	4.5 Discuss Multiplexers: definition, relevance, gate level circuit of simple Multiplexers (4:1)
		4th	4.6 Discuss De-multiplexers: definition, relevance, gate level circuit of simple De-multiplexers (1:4)
10	1st week 02nd oct. to 07th oct	1st	5.1 Define Sequential Circuit: Explain with examples & distinguish from
		2nd	5.3 Define Flip-Flop & Explain SR Flip Flop using NAND, NOR Latch (un-clocked
		3rd	5.5 Concept of Racing and how it can be avoided.
		4th	5.4 Study Clocked RS,D,T,JK, MS-JK flip-flop with at level circuit, logic Circuit and truth table
11	2nd week 9th oct. to 14th oct	1st	5.6 Applications of flip-flops and its conversation
		2nd	6.1 list of various logic families & standard notations
		3rd	6.2 Explain propagation Delay, fan-out, fan-in, Power Dissipation
		4th	6.3 Explain Features, circuit operation &various applications of TTL (NAND), CMOS (NAND & NOR) & ECL
12	3rd week 16th oct to 20th oct.	1st	6.4 Explain Tristate Gate
		2nd	7.1 List the different types of counters-Synchronous and
		3rd	7.4 Attenuation and Gain, Bel , Decibel & neper and their relations.
		4th	7.2 Explain the modulus of a counter 7.3 Compare Synchronous and Asynchronous counter
13	1st week 30th oct. to 04th	1st	7.4 Explain the working of 4 bit ripple counter (UP & DOWN) with truth table and timing diagram
		2nd	8.1 Explain the working of buffer register 8.2 Explain the working of various types of shift registers SISO, SIPO,

	Nov	3rd	8.4 Explain the applications of Shift Registers 8.5 Explain Ring &Johnson Counter
		4th	DAC-Resolution, Accuracy and Conversion time
14	2nd week 6th Nov to 11th Nov	1st	9.4 Explain the performance parameters of ADC-Resolution, Quantization Error
		2nd	9.4 Explain the performance parameters of ADC-Resolution, Quantization Error
		3rd	8.4 Explain the applications of Shift Registers 8.5 Explain Ring &Johnson Counter
		4th	8.4 Explain the applications of Shift Registers 8.5 Explain Ring &Johnson Counter
15	3rd week 13th Nov to 18th Nov	1st	DAC-Resolution, Accuracy and Conversion time
		2nd	DAC-Resolution, Accuracy and Conversion time
		3rd	DAC-Resolution, Accuracy and Conversion time
		4th	9.3 Explain R-2R Ladder type DAC
16	4th week 20th Nov to 25th Nov	1st	9.3 Explain R-2R Ladder type DAC
		2nd	9.3 Explain R-2R-Ladder type DAC
		3rd	9.4 Explain the performance parameters of ADC-Resolution, Quantizat
		4th	9.4 Explain the performance parameters of ADC-Resolution, Quantizat
17	5th week 27th Nov to 30th Nov	1st	9.4 Explain the performance parameters of ADC-Resolution, Quantizat
		2nd	9.5 Explain the Ramp type and Dual Slope ADC's
		3rd	9.5 Explain the Ramp type and Dual Slope ADC's
		4th	9.5 Explain the Ramp type and Dual Slope ADC's

Signature of the Teacher