

**LESSON PLAN: Entrepreneurship and Management & Smart Technology (TH-1) FOR THE SESSION 2025-26(WINTER-2025) BATCH-2023-26, GOVT. POLYTECHNIC, KANDHIMALA**

Discipline: <b>Civil Engineering</b>	Semester: 5th	Name of the Teaching Faculty : <b>Rahul Kumar Rout, Lecture stage I in Civil Engg.</b>
Subject: <b>Entrepreneurship and Management &amp; Smart Technology (TH-1)</b>	No. of days/ per week class allotted: <b>4</b>	Semester From Date : <b>14/07/2025</b> to Date: <b>15/11/2025</b> No. of Weeks: <b>15</b>
Week	Class Day	Theory/ Practical Topics
		1. Entrepreneurship
1st	1st	Concept /Meaning of Entrepreneurship
	2nd	Need of Entrepreneurship
	3rd	Characteristics, Qualities and Types of entrepreneur, Functions
	4th	Barriers in entrepreneurship
2nd	1st	Entrepreneurs vrs. Manager
	2nd	Forms of Business Ownership: Sole proprietorship, partnership forms and others
	3rd	Types of Industries, Concept of Start-ups
	4th	Entrepreneurial support agencies at National, State, District Level( Sources): DIC, NSIC, OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
3rd	1st	Entrepreneurial support agencies at National, State, District Level( Sources): DIC, NSIC, OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
	2nd	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks
		2. Market Survey and Opportunity Identification (Business Planning)
	3rd	Business Planning
	4th	SSI, Ancillary Units, Tiny Units, Service sector Units
4th	1st	Time schedule Plan, Agencies to be contacted for Project Implementation
	2nd	Time schedule Plan, Agencies to be contacted for Project Implementation
	3rd	Assessment of Demand and supply and Potential areas of Growth
	4th	Assessment of Demand and supply and Potential areas of Growth
5th	1st	Identifying Business Opportunity
	2nd	Final Product selection
		3. Project report Preparation
	3rd	Preliminary project report
	4th	Detailed project report, Techno economic Feasibility
6th	1st	Detailed project report, Techno economic Feasibility
	2nd	Project Viability
		4. Management Principles
	3rd	Definitions of management
	4th	Principles of management
7th	1st	Functions of management (planning, organising, staffing, directing and controlling etc.)
	2nd	Functions of management (planning, organising, staffing, directing and controlling etc.)
	3rd	Level of Management in an Organisation
		5. Functional Areas of Management
	4th	a) Production management □ Functions, Activities □ Productivity
8th	1st	Quality control □ Production Planning and control
	2nd	b) Inventory Management □ Need for Inventory management
	3rd	Models/Techniques of Inventory management
	4th	c) Financial Management □ Functions of Financial management □ Management of Working capital □ Costing (only concept)

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11.07.25  
(Lect stage-I), CIVIL



9th	1st	Break even Analysis □ Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)
	2nd	d) Marketing Management □ Concept of Marketing and Marketing Management
	3rd	Marketing Techniques (only concepts) □ Concept of 4P's (Price, Place, Product, Promotion)
	4th	e) Human Resource Management □ Functions of Personnel Management
10th	1st	e) Human Resource Management □ Functions of Personnel Management
		6. Leadership and Motivation
	2nd	a) Leadership □ Definition and Need/Importance □ Qualities and functions of a leader
	3rd	Manager Vs Leader □ Style of Leadership (Autocratic, Democratic, Participative)
	4th	b) Motivation □ Definition and characteristics
11th	1st	Importance of motivation □ Factors affecting motivation
	2nd	Theories of motivation (Maslow) □ Methods of Improving Motivation
	3rd	Importance of Communication in Business □ Types and Barriers of Communication
	4th	Work Culture, TQM & Safety
		Human relationship and Performance in Organization
12th	1st	Relations with Peers, Superiors and Subordinates
	2nd	TQM concepts: Quality Policy, Quality Management, Quality system
	3rd	Accidents and Safety, Cause, preventive measures, General Safety Rules, Personal Protection Equipment(PPE)
	4th	Accidents and Safety, Cause, preventive measures, General Safety Rules, Personal Protection Equipment(PPE)
		Legislation
13th	1st	a) Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights
	2nd	a) Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights
	3rd	b) Features of Factories Act 1948 with Amendment (only salient points)
	4th	b) Features of Factories Act 1948 with Amendment (only salient points)
14th	1st	c) Features of Payment of Wages Act 1936 (only salient points)
	2nd	c) Features of Payment of Wages Act 1936 (only salient points)
	3rd	Smart Technology
		Concept of IOT, How IOT works
	4th	Concept of IOT, How IOT works
15th	1st	Components of IOT, Characteristics of IOT, Categories of IOT
	2nd	Components of IOT, Characteristics of IOT, Categories of IOT
	3rd	Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc.
	4th	Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc.

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14/07/2025

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