

GOVERNMENT POLYTECHNIC BOLANGIR
DEPARTMENT OF CIVIL ENGINEERING
LESSON PLAN
SESSION: 2023-24

SUBJECT: ENTREPRENEURSHIP and MANAGEMENT & SMART TECHNOLOGY	BRANCH: CIVIL ENGINEERING
NAME OF THE FACULTY: SOURAV KUMAR BEHERA	SEMESTER: 5 TH

SL NO.	Chapter	Hours	Lecture No.	DETAILED CONTENTS
1	Chapter -1	10	Entrepreneurship	
			1	Concept /Meaning of Entrepreneurship
			2	Need of Entrepreneurship
			3	Characteristics, Qualities and Types of entrepreneur, Functions
			4	Barriers in entrepreneurship
			5	Entrepreneurs vrs. Manager
			6	Forms of Business Ownership: Sole proprietorship, partnership forms and others
			7	Types of Industries, Concept of Start-ups
			8	Entrepreneurial support agencies at National, State, District Level (Sources): DIC, NSIC,OSIC, SIDBI, NABARD
			9	Commercial Banks, KVIC etc.
			10	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks
2	Chapter -2	8	Market Survey and Opportunity Identification (Business Planning)	
			1	Business Planning
			2	SSI, Ancillary Units, Tiny Units, Service sector Units
			3	Time schedule Plan,
			4	Agencies to be contacted for Project Implementation
			5	Assessment of Demand and supply
			6	Potential areas of Growth
			7	Identifying Business Opportunity
3	Chapter -3	4	Project report Preparation	
			1	Preliminary project report
			2	Detailed project report
			3	Techno economic Feasibility
			4	Project Viability

4	Chapter -4	5	Management Principles	
			1	Definitions of management
			2	Principles of management
			3	Functions of management (planning, organising)
			4	Functions of management (staffing, directing and controlling etc)
			5	Level of Management in an Organisation
5	Chapter -5	10	Functional Areas of Management	
			1	a) Production management - Functions, Activities & Productivity
			2	Quality control , Production Planning and control
			3	b) Inventory Management -Need for Inventory management
			4	Models/Techniques of Inventory management
			5	c) Financial Management - Functions of Financial management , Management of Working capital , Costing (only concept)
			6	Break even Analysis , Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)
			7	d) Marketing Management -Concept of Marketing and Marketing Management
			8	Marketing Techniques (only concepts) , Concept of 4P s (Price, Place, Product, Promotion)
			9	e) Human Resource Management -Functions of Personnel Management
			10	Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages
6	Chapter -6	6	Leadership and Motivation	
			1	a) Leadership - Definition and Need/Importance , Qualities and functions of a leader
			2	Manager Vs Leader
			3	Style of Leadership (Autocratic, Democratic, Participative)
			4	b) Motivation -Definition and characteristics - Importance of motivation ,Factors affecting motivation
			5	Theories of motivation (Maslow) , Methods of Improving Motivation
			6	Importance of Communication in Business ,Types and Barriers of Communication

7	Chapter -7	5	Work Culture, TQM & Safety	
			1	Human relationship and Performance in Organization
			2	Relations with Peers, Superiors and Subordinates
			3	TQM concepts: Quality Policy, Quality Management, Quality system
			4	Accidents and Safety, Cause, preventive measures,
			5	General Safety Rules , Personal Protection Equipment(PPE)
8	Chapter -8	6	Legislation	
			1	a) Intellectual Property Rights (IPR)
			2	Patents
			3	Trademarks
			4	Copyrights
			5	b) Features of Factories Act 1948 with Amendment (only salient points)
			6	c) Features of Payment of Wages Act 1936 (only salient points)
9	Chapter -9	6	Smart Technology	
			1	Concept of IOT, How IOT works
			2	Components of IOT, Characteristics of IOT, Categories of IOT
			3	Applications of IOT- Smart Cities, Smart Transportation
			4	Smart Home, Smart Healthcare
			5	Smart Industry, Smart Agriculture, Smart Energy Management etc.
			6	Previous year Question Discussion