



GOVERNMENT POLYTECHNIC, PURI DEPARTMENT OF ELECTRICAL ENGINEERING

Discipline: ELECTRICAL ENGINEERING	Semester: 5TH	Name of the Teaching Faculty: MR. JASOBANTA BARIK, PTGF IN ELECTRICAL ENGINEERING	
Subject: ENTREPRENEURSHIP MANAGEMENT & SMART TECHNOLOGY	No. of classes allotted per week: 04	Semester From date: 01.08.2023 To Date: 30.11.2023 No. of Weeks: 15	
PRE- REQUISITE	Basic knowledge about the Entrepreneurship and business management		
COURSE OUTCOMES	On successful completion, a student will be able to: 1. Know about basic fundamentals of entrepreneurship, Types of Industries and Start-ups. 2. Understanding about various schemes of assistance provided by support agencies. 3. Conduct market survey and prepare project reports 4. Acquire knowledge about management principles with functional areas of management, Leadership and motivation 5. Apply general safety principles, TQM principles and I.O.T based technologies in a smart environment creating a holistic work-culture environment.		
Week	Class Day	Theory/Practical Topics	DELIVERY METHOD
1 ST	1 ST	Concept /Meaning of Entrepreneurship, Need of Entrepreneurship	Whiteboard
	2 ND	Characteristics, Qualities and Types of entrepreneur, Functions	Whiteboard
	3 RD	Barriers in entrepreneurship	Whiteboard
	4 TH	Entrepreneurs vs. Manager	Whiteboard
2 ND	1 ST	Forms of Business Ownership: Sole proprietorship, partnership forms and others	Whiteboard
	2 ND	Entrepreneurial support agencies at National, State, District Level(Sources): DIC, NSIC,OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc	Whiteboard
	3 RD	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks	Whiteboard
	4 TH	QUIZ&ASSIGNMENT-I	Lecture notes
3 RD	1 ST	Business Planning	Whiteboard
	2 ND	SSI, Ancillary Units, Tiny Units, Service sector Units	Whiteboard
	3 RD	Time schedule Plan, Agencies to be contacted for Project Implementation	Whiteboard
	4 TH	Assessment of Demand and supply and Potential areas of Growth	Whiteboard
4 TH	1 ST	Identifying Business Opportunity	Whiteboard
	2 ND	Final Product selection	Whiteboard
	3 RD	QUIZ&ASSIGNMENT-II	Lecture notes
	4 TH	Preliminary project report	Whiteboard
5 TH	1 ST	Detailed project report, Techno economic Feasibility	Whiteboard
	2 ND	Project Viability	Whiteboard
	3 RD	QUIZ&ASSIGNMENT-III	Lecture notes
	4 TH	Definitions of management, Principles of management	Whiteboard

6 TH	1 ST	Functions of management (planning, organizing, staffing, directing and controlling etc.)	Whiteboard
	2 ND	Level of Management in an Organization	Whiteboard
	3 RD	QUIZ&ASSIGNMENT-IV	Lecture notes
	4 TH	Production management(Functions, Activities Productivity, Quality control, Production planning and control)	Whiteboard
7 TH	1 ST	Inventory Management(Need for Inventory management, Models/Techniques of Inventory management)	Whiteboard
	2 ND	Financial Management(Functions of Financial management , Management of Working capital, Costing (only concept) , Break even Analysis) Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)	Whiteboard
	3 RD	Marketing Management(Concept of Marketing and Marketing Management ,Marketing Techniques (only concepts) ,Concept of 4P s (Price, Place, Product, Promotion)	Whiteboard
	4 TH	Human Resource Management(Functions of Personnel Management, Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages)	Whiteboard
8 TH	1 ST	QUIZ&ASSIGNMENT-V	Lecture notes
	2 ND	Leadership,(Definition and Need/Importance)	Whiteboard
	3 RD	Qualities and functions of a leader	Whiteboard
	4 TH	Manager Vs Leader	Whiteboard
9 TH	1 ST	Style of Leadership (Autocratic, Democratic, Participative)	Whiteboard
	2 ND	Motivation(Definition and characteristics)	Whiteboard
	3 RD	Importance of motivation	Whiteboard
	4 TH	Factors affecting motivation	Whiteboard
10 TH	1 ST	Theories of motivation (Maslow)	Whiteboard
	2 ND	Methods of Improving Motivation	Whiteboard
	3 RD	Importance of Communication in Business	Whiteboard
	4 TH	Types and Barriers of Communication	Whiteboard
11 TH	1 ST	QUIZ&ASSIGNMENT-VI	Lecture notes
	2 ND	Work Culture, TQM & Safety(Human relationship and Performance in Organization)	Whiteboard
	3 RD	Relations with Peers, Superiors and Subordinates	Whiteboard
	4 TH	TQM concepts: Quality Policy, Quality Management, Quality system	Whiteboard
12 TH	1 ST	Accidents and Safety, Cause, preventive measures, General Safety Rules , Personal Protection Equipment(PPE)	Whiteboard
	2 ND	QUIZ&ASSIGNMENT-VII	Lecture notes
	3 RD	Legislation(Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights)	Whiteboard
	4 TH	Features of Factories Act 1948 with Amendment (only salient points)	Whiteboard
13 TH	1 ST	Features of Payment of Wages Act 1936 (only salient points)	Whiteboard
	2 ND	QUIZ&ASSIGNMENT-VIII	Lecture notes
	3 RD	Smart Technology(Concept of IOT, How IOT works)	Whiteboard
	4 TH	Components of IOT, Characteristics of IOT, Categories of IOT	Whiteboard
14 TH	1 ST	Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc	
	2 ND	QUIZ&ASSIGNMENT-IX	Lecture notes
	3 RD	REVISION	
	4 TH	REVISION	

15 TH	1 ST	REVISION	
	2 ND	REVISION	
	3 RD	REVISION	
	4 TH	REVISION	

LEARNING RESOURCES:

01. Entrepreneurship Development and Management by R.K Singhal, Katson Books., New Delhi
02. Entrepreneurship Development and Management by U Saroj and V Mahendiratta, Abhishek Publications, Chandigarh
03. Entrepreneurship Development and Management by Vasant Desai, Himalaya Pub. House
04. Industrial Engineering and Management by O.P Khanna ,Dhanpat Rai and Sons

WEBSITE RESOURCES:

01. <https://youtu.be/9BXq3gcLSMs> (NPTEL)
02. https://youtu.be/c9ZENOt1j_w (NPTEL)

Jasobanta Banu
Sign. of Faculty concerned 11/09/23

G.P. Puri
Principal
G.PPuri 11/8/23

L.P. Chandra
Sign. of HODi/c 11/8/23