



GOVERNMENT POLYTECHNIC KORAPUT

Th1.ENTREPRENEURSHIPANDMANAGEMENT &SMARTTECHNOLOGY

NameoftheCourse:DiplomainElectricalEngineering			
Faculty: MaheshKumarBiswal		Semester duration 9/10/21 to 8/01/22	
Course code:	Th1	Semester	5 th
Total Period:	60	Examination	3hrs
Theory periods:	4P/week	Internal Assessment:	20
Maximum marks:	100	End Semester Examination:	80

DEPARTMENT OF ELECTRICAL

Vision: -

To create competent and industry ready Electrical diploma engineers with professional and social values to meet future challenges.

Mission: -

- To prepare diploma holders through "qualitative competency-based education system" to compete with national requirement along with core values
- To produce dynamic Electrical Engineers to serve the society and industry
- To develop leadership qualities, communication skills, critical thinking and attitude for Lifelong learning.

Program educational objectives: -

PEO1:	Apply technical knowledge and skills learned in the field of Electrical Engineering to excel in professional and/or higher education.
PEO2:	to provide students an excellent academic environment and make them aware the needs of Society and Industry to become a successful Professional/Entrepreneur.
PEO3:	To engage in lifelong learning, career enhancement to adopt emerging technologies

Course outcomes: -

Co1	To create entrepreneurial and managerial skills.
Co2	Lunch startup and new business ventures
Co3	Develop leadership qualities and sprit of team man ship.
Co4	Develop and sustainable and conducive work culture, TQM and safety with the help of smart technology.





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TOPICWISE DISTRIBUTION OF PERIODS

Sl.No.	Topics	Periods
1.	Entrepreneurship	10
2.	Market Survey and Opportunity Identification (Business Planning)	8
3.	Project report Preparation	4
4.	Management Principles	5
5.	Functional Areas of Management	10
6.	Leadership and Motivation	6
7.	Work Culture, TQM & Safety	5
8.	Legislation	6
9.	Smart Technology	6
	TOTAL	60

Week	Day	Theory topic
1 st	1 st	Entrepreneurship: Concept/Meaning of Entrepreneurship
	2 nd	Need of Entrepreneurship, Characteristics, Qualities and Types of entrepreneur, Functions
	3 rd	Barriers in entrepreneurship, Entrepreneurs vs. Manager
	4 th	Forms of Business Ownership: Sole proprietorship, partnership forms and others
2 nd	1 st	Types of Industries, Concept of Start-ups
	2 nd	Entrepreneurial support agencies at National, State, District Level (Sources): DIC, NSIC, OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
	3 rd	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks
	4 th	Market Survey and Opportunity Identification (Business Planning): Business Planning
3 rd	1 st	SSI, Ancillary Units, Tiny Units, Services sector Units
	2 nd	Time schedule Plan, Agencies to be contacted for Project Implementation
	3 rd	Assessment of Demand and supply and Potential areas of Growth
	4 th	Identifying Business Opportunity
4 th	1 st	Final Product selection
	2 nd	Project report Preparation: Preliminary project report
	3 rd	Detailed project report, Technoeconomic Feasibility
	4 th	Project Viability
5 th	1 st	Management Principles: Definitions of management
	2 nd	Principles of management
	3 rd	Functions of management (planning, organizing, staffing, directing and controlling etc.)
	4 th	Level of Management in an Organization
6 th	1 st	Functional Areas of Management: Production management
	2 nd	Functions, Activities, Productivity
	3 rd	Quality control, Production, Planning and control
	4 th	Inventory Management
7 th	1 st	Need for Inventory management, Models/Techniques of Inventory management
	2 nd	Financial Management

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	3rd	Functions of Financial management
	4th	Management of Working capital ,Costing (only concept)
8th	1st	Break even Analysis
	2nd	Brief idea about Accounting Terminologies: Book Keeping
	3rd	Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)
	4th	Marketing Management: Concept of Marketing and Marketing Management
9th	1st	Marketing Techniques (only concepts)
	2nd	Concept of 4P s (Price, Place, Product, Promotion)
	3rd	Human Resource Management
	4th	Functions of Personnel Management
10th	1st	Manpower Planning, Recruitment, Sources of manpower
	2nd	Selection process, Method of Testing, Methods of Training & Development
	3rd	Payment of Wages
	4th	Leadership and Motivation: Leadership Definition and Need/Importance of leader Qualities of a leader
11th	1st	functions of a leader , Manager Vs Leader
	2nd	Style of Leadership (Autocratic, Democratic, Participative)
	3rd	Motivation: Definition and characteristics
	4th	Importance of motivation
12th	1st	Factors affecting motivation
	2nd	Theories of motivation (Maslow) ,Methods of Improving Motivation
	3rd	Importance of Communication in Business
	4th	Types and Barriers of Communication
13th	1st	Work Culture, TQM & Safety: Human relationship and Performance in Organization .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	Legislation: Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights
14th	1st	Features of Factories Act 1948 with Amendment (only salient points)Features of Payment of Wages Act 1936 (only salient points)
	2nd	Smart Technology: Concept of IOT, How IOT works 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	Revision : chapter 1,2,3
15th	1st	Revision : chapter 4,5,6
	2nd	Revision : chapter 7,8,9
	3rd	Discuss of previous year paper question and answers
	4th	Discuss of previous year paper question and answers

Signature of HOD(electrical)

Signature of faculty