

**Govt. Polytechnic Nayagarh**

<b>Discipline:</b> Civil Engineering	<b>Semester:</b> 5 <sup>TH</sup> Semester		<b>Name of the teaching faculty:</b> ER. Adyashree Sahoo
<b>Subject:</b> <b>Entrepreneurship And Management &amp; Smart Technology</b>	<b>No. of Days/ per week class allotted: 04 period per week.</b>		<b>No. of weeks: 13 weeks</b>
<b>Week</b>	<b>Period</b>	<b>No of period available</b>	<b>Theory Topics</b>
1ST	1,2	2	1.0 Entrepreneurship Concept /Meaning of Entrepreneurship Need of Entrepreneurship
	3	1	Characteristics, Qualities and Types of entrepreneur,
	4	1	Functions, Barriers in entrepreneurship Entrepreneursvrs. Manager
2ND	5	1	Forms of Business Ownership: Sole proprietorship, partnership forms and others
3RD	6,7	2	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.
	8	1	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks 2.0 Market Survey and Opportunity Identification (Business Planning) Business Planning SSI, Ancillary Units, Tiny Units, Service sector Units
	9	1	Monthly Class Test

**Govt. Polytechnic Nayagarh**

4TH	10,11	2	Time schedule Plan, Agencies to be contacted for Project Implementation
	12	1	Assessment of Demand and supply and Potential areas of Growth Identifying Business Opportunity Final Product selection
	13	1	3.0 Project report Preparation Preliminary project report Detailed project report
5TH	14,15	2	Techno economic Feasibility Project Viability
	16	1	4.0 Management Principles Definitions of management Principles of management
	17	1	Functions of management (planning, organising, staffing, directing and controlling etc.) Level of Management in an Organisation
6TH	18,19	2	5.0 Functional Areas of Management a) Production management
	20	1	Functions, Activities Productivity Quality control Production Planning and control
	21	1	b) Inventory Management Need for Inventory management Models/Techniques of Inventory management
7TH	22,23	2	c) Financial Management Functions of Financial management Management of Working capital Costing (only concept)

**Govt. Polytechnic Nayagarh**

			Break even Analysis
	24	1	Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts
	25	1	Monthly Class Test
8TH	26,27	2	d) Marketing Management Concept of Marketing and Marketing Management
	28	1	Internal Assessment
	29	1	Marketing Techniques (only concepts) Concept of 4P s (Price, Place, Product, Promotion) e) Human Resource Management Functions of Personnel Management
9TH	30,31	2	Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages
	32	1	6.0 Leadership and Motivation a) Leadership Definition and Need/Importance Qualities and functions of a leader Manager Vs Leader Style of Leadership (Autocratic, Democratic, Participative
	33	1	b) Motivation Definition and characteristics Importance of motivation Factors affecting motivation
10TH	34,35	2	Theories of motivation (Maslow) Methods of Improving Motivation

**Govt. Polytechnic Nayagarh**

	36	1	Importance of Communication in Business Types and Barriers of Communication
	37	1	7.0 Work Culture, TQM & Safety Human relationship and Performance in Organization
11TH	38,39,40	2	Relations with Peers, Superiors and Subordinates TQM concepts: Quality Policy, Quality Management, Quality system
	41	1	Accidents and Safety, Cause, preventive measures, General Safety Rules , Personal Protection Equipment(PPE)
12TH	42,43,44	3	8.0 Legislation a) Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights b) Features of Factories Act 1948 with Amendment (only salient points)
	45	1	Monthly Class Test
13TH	46,47,48,49	4	c) Features of Payment of Wages Act 1936 (only salient points) 9.0 Smart Technology Concept of IOT, How IOT works Components of IOT, Characteristics of IOT, Categories of IOT
14TH	50,51,52,53	4	Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc.
15TH	54	1	Revision
	55	1	Previous Year Question Discussion

**Govt. Polytechnic Nayagarh**

	56	1	Revision
	57	1	Revision
16th	58	1	Revision
	59	1	Revision
	60	1	Revision