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| Discipline :- **MECHANICAL** **ENGG.** | Semester:-**5th** | Name of the Teaching Faculty:- **IPSITA BEHERA** |
| Subject:-**Th1.****ENTREPRENEURSHIP and MANAGEMENT & SMART****TECHNOLOGY** | No of Days/per Week Class Allotted :- **5** | Semester From:- **17TH AUGUST,2020** To:- **30TH NOVEMBER,2020**No of Weeks:- **15** |
| **Week** | **Class Day** | **Theory/ Practical Topics** |
| 1st | 1st | **Entrepreneurship**Concept /Meaning of Entrepreneurship |
| 2nd | Need of Entrepreneurship |
| 3rd | Characteristics, Qualities and Types of entrepreneur, Functions |
| 4th | Barriers in entrepreneurship |
| 2nd | 1 | Entrepreneurs vrs. Manager |
| 2nd | Forms of Business Ownership: Sole proprietorship, partnership formsand 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, KVICetc. |
| 3rd | 1th | Entrepreneurial support agencies at National, State, District Level( Sources): DIC, NSIC,OSIC, SIDBI, NABARD, Commercial Banks, KVICetc. |
| 2nd | Technology Business Incubators (TBI) and Science and TechnologyEntrepreneur Parks |
| 3rd | **Market Survey and Opportunity Identification (Business Planning)**Business Planning |
| 4th | SSI, Ancillary Units, |
| 4th | 1st | Tiny Units, Service sector Units |
| 2nd | Time schedule Plan, Agencies to be contacted for ProjectImplementation |
| 3rd | Assessment of Demand and supply and Potential areas of Growth |
| 4th | Identifying Business Opportunity |
| 5th | 1st | Final Product selection |
| 2nd | **Project report Preparation**Preliminary project report |
| 3rd | Detailed project report, |
| 4th | Techno economic Feasibility |
| 6th | 1st | Project Viability |
| 2nd | **Management Principles**Definitions of management |
| 3rd | Principles of management |
| 4th | Functions of management (planning, organising, staffing, directing andcontrolling etc.) |
| 7th | 1st | Functions of management (planning, organising, staffing, directing andcontrolling etc.) |
| 2nd | Level of Management in an Organisation |
| 3rd | **Functional Areas of Management**a) Production managementFunctions, Activities |

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|  |  | Productivity |
| 4th | * Quality control

Production Planning and control |
| 8th | 1st | b) Inventory ManagementNeed for Inventory management Models/Techniques of Inventory management |
| 2nd | Financial ManagementFunctions of Financial management Management of Working capital |
| 3rd | Costing (only concept)Break even Analysis |
| 4th | Brief idea about Accounting Terminologies: Book Keeping, Journalentry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts |
| 9th | 1st | Marketing ManagementConcept of Marketing and Marketing Management |
| 2nd | Marketing Techniques (only concepts)Concept of 4P s (Price, Place, Product, Promotion) |
| 3rd | Human Resource ManagementFunctions of Personnel Management |
| 10th | 1st | Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development,Payment of Wages |
| 2nd | **Leadership and Motivation**LeadershipDefinition and Need/ImportanceQualities and functions of a leader |
| 3rd | Manager Vs LeaderStyle of Leadership (Autocratic, Democratic, Participative) |
| 4th | b) MotivationDefinition and characteristicsImportance of motivation |
| 11th | 1st | Factors affecting motivationTheories of motivation (Maslow) |
| 2nd | Methods of Improving MotivationImportance of Communication in Business |
| 3rd | 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, |
| 4th | General Safety Rules , Personal Protection Equipment(PPE) |
| 13th | 1st | **Legislation**a) Intellectual Property Rights(IPR) |
| 2nd | Patents, Trademarks, Copyrights |
| 3rd | b) Features of Factories Act 1948 with Amendment (only salient points) |
| 4th | c) Features of Payment of Wages Act 1936 (only salient points) |
| 14th | 1st | **Smart Technology*** Concept of IOT, How IOT works
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| 2nd | * Components of IOT, Characteristics of IOT, Categories of IOT
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|  | 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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