

INDUSTRIAL MANAGEMENT AND ENTREPRENEURSHIP

ENCH 306

Lecture : 3
Tutorial : 1
Practical : 0

Year : III
Part : I

Course Objectives:

The objective of this course is to provide concepts of management theories, industrial organizational practices, quality control systems, and concepts of entrepreneurship, including the processes of establishing and operating new ventures. By the end of the course, students will be able to analyze industrial management practices, evaluate entrepreneurial opportunities, and design a comprehensive business plan.

1 Organization and Management (6 hours)

- 1.1 Concept and definitions
- 1.2 Historical development
- 1.3 Principles and structure of organization
- 1.4 Levels of management
- 1.5 Theories of management

2 Human Resource Management (4 hours)

- 2.1 Human resource planning and selection
- 2.2 Motivation theories
- 2.3 Job specification and description
- 2.4 Job evaluations and merit rating

3 Production and Operation Management (8 hours)

- 3.1 Production and operation management in manufacturing and service environments
- 3.2 Emerging trends
- 3.3 Product development and testing: Product life cycle
- 3.4 Product management and project evaluation techniques
- 3.5 Production planning
 - 3.5.1 Intermediate planning in perspective
 - 3.5.2 Concept and overview of aggregate planning
 - 3.5.3 Basic strategies for meeting uneven demand
 - 3.5.4 Techniques for aggregate planning

- 4 Quality and Productivity Engineering (6 hours)**
- 4.1 Productivity and factors affecting productivity
 - 4.2 Concept of quality
 - 4.3 Total quality management (TQM)
 - 4.4 Statistical process control (SPC)
 - 4.5 Lean production and continuous improvement (Kaizen)
- 5 Entrepreneurship (4 hours)**
- 5.1 Need, scope and importance of entrepreneurship
 - 5.2 Entrepreneurial process
 - 5.3 Dynamics of entrepreneurship
- 6 Business Idea and Business Plan (9 hours)**
- 6.1 Business opportunities
 - 6.2 Generation of ideas
 - 6.3 Feasibility analysis
 - 6.4 Industry and competitor's analysis
 - 6.5 Formulation of business plan
- 7 Establishing a Firm (4 hours)**
- 7.1 Business licenses and permit
 - 7.2 Form of business organization
 - 7.3 Financing and source of funding
 - 7.4 Team building
- 8 Marketing management and growth strategies (4 hours)**
- 8.1 Marketing concept and strategy; Market segmentation and target group
 - 8.2 The 4Ps (Product, Price, Place and Promotion) of marketing
 - 8.3 Key marketing issues for new ventures
 - 8.4 Intellectual property rights
- Tutorial (15 hours)**
- 1. Conduct SWOT analysis of a selected business enterprise
 - 2. Make a questionnaire for market survey of a potential business
 - 3. Prepare a business plan of a business idea
 - 4. Present the business plan with the mock audience
 - 5. Understand and analyze the financial statements of a selected real business organization
 - 6. Prepare control charts for quality control of an operation
 - 7. Calculate and draw networks for project evaluation
 - 8. Prepare job description of an employee

Final Exam

The questions will cover all the chapters in the syllabus. The evaluation scheme will be as indicated in the table below:

Chapter	Hours	Marks distribution*
1	6	6
2	4	6
3	8	10
4	6	8
5	4	6
6	9	12
7	4	6
8	4	6
Total	45	60

* There may be minor deviation in marks distribution.

References

1. Salvendy, G. (1982). Handbook of industrial engineering and management (Latest Edition). John Wiley and Sons.
2. Barringer, B. R., Ireland, R. D. (2016). Entrepreneurship: Successfully launching new ventures. Pearson Education.
3. Khanna, P., Kapur, J. C. (1995). Industrial engineering and management (Latest Edition). Dhanpat Rai & Sons.
4. Stevenson, W. J. (2020). Operations management. McGraw Hill.
5. Kotler, P. T., Keller, K. L. (2011). Marketing management. Pearson.
6. Robbins, S. P., DeCenzo, D. A. (2015). Human resource management. Wiley India.