

17MB206 INNOVATION AND PRODUCT DEVELOPMENT

Course Objective:

The objective of this course is to enable the students to gain knowledge about the Innovation and New Product Development. This course will develop skills of the students in the area of Innovation Management and Design of Innovation Process, Strategic alliances, New product and package development. To acquaint the students about various issues of new service innovation, market research and its influence on new product development.

Course Outcomes:

At the end of the course the student will be able to

- Understand concepts; develop skills in the area of innovation management.
- Able to develop strategic alliances and networks for innovation.
- Hone their abilities for development of new products.
- Hone their abilities for the development of new packaging for the products.
- Able to develop skills for new service innovation and market research for new products.

UNIT - I

Innovation Management: Introduction, importance and need of innovation, popular view of innovation, models of innovation, innovation as a management process, the role of state in innovation and the market, innovation diffusion theories.

Managing innovation with in firms: Managing uncertainty, organizational characteristics that facilitate the innovation process, role of individual in the innovation process, IT systems and their impact on innovation.

UNIT - II

Innovation and Operations Management: Design of innovation, innovation in the management of operations process, technology trajectories knowledge base of an organization, learning organization, degree of innovativeness, technology strategy.

Strategic alliances and networks: forms of strategic alliances, open innovation, technology transfer and models of technology transfer.

UNIT - III

New product development.

Product Strategy: New product plan, product strategy, differentials and positioning, competing with other products, new products and property, considerations when developing a new product development (NPD) strategy. NPD strategy for growth, over of NPD theories. Models of new product development.

UNIT - IV

Packaging and Product Development: Basic principles of packaging, characteristic of package, product rejuvenation, new product opportunities through packaging, product and packing size variation, packaging system and retailer acceptance.

UNIT - V

New Service Innovation and Market Research: New service innovation and market research and its influence on a new product development, different types of services, characteristics of a services, classification of service innovations, new service development models, service innovation and the consumer.

Market Research and New Product Development: Testing new products, techniques of testing new products, technology intensive products, new products as projects, NPD across different industries.

Skill Development:

(These activities are only indicative, the Faculty member can innovate)

1. Visit any software company and identify how they manage the innovation.
2. Prepare a report on Technology transfer models followed by a company that you have visited recently.
3. Identify the new product development (NPD) strategies followed by a company known to you.
4. Prepare a report on new product opportunities generated through packaging in the recent past.
5. Select a product, conduct market research and prepare market survey report.

Text Book:

1. Paul Trout “Innovation and New Product Development”, Pearson Pub.

REFERENCE BOOKS:

1. Karl Ulrich, Steven and Anitha Goel “Product Design and Development”, MHE.
2. CK Prahalad and MS Kisan “The New Age of Innovation”, MHE.
3. Dariun Rafinejod “Innovation, Product Development and Commercialization”, Cengage.