

P2PNBC07 - TECHNOLOGY, INNOVATION AND QUALITY MANAGEMENT

Module I (8 hours)

Understanding Management of Technology, innovation technology evaluation, Diffusion. Technology and competition, Integration of strategic planning and technology planning.

Module II (10 hours)

Technology Strategy: Technology intelligence – collaborative mode, Appropriation of technology – Technology evaluation and financing – changing role of R & D, Management of manufacturing technology – corporate cultures – technology audits.

Module III (10 hours)

Introduction to quality – basic concepts, definition, quality of design and conformance, quality circle, ISO 9000 & their documentation. Data collection and presentation – SQC techniques & their applications, presentation of data, frequency distributions and pie diagram.

Module IV (12 hours)

Measures of central tendency & dispersion – calculation of mean, median, mode, standard deviation & variance, concept of distribution, introduction to tests to simple hypothesis. Inspection, sampling & correlation analysis.

References:

1. Babcock D.L. "Managing Engineering Technology" Prentice Hall.
2. Burgelman et.al "Strategic Management of Technology and Innovation" Tata McGraw Hill (2001).
3. Cleland and Bursic "Strategic Technology management" Amacom, Newyork.
4. Narayanan U.K. "Managing Technology and Innovation for competitive Advantage" Pearson Education, Asia 2001.
5. Betz F "Managing Technology – competing Through New Ventures, Innovation and Corporate Research." Prentice Hall.
6. B. L Agarwal, Basic Statistics, Wiley Eastern Limited, II Chapter
7. Suddhendu Biswas, Statistics of Quality Control, Wiley Eastern Limited, 2008
8. Juran&Geyna, Modern Methods for Quality Control and Improvement, John Wiley & Sons 1986