# UTTAR PRADESH TECHNICAL UNIVERSITY LUCKNOW



## **SYLLABUS**

of

Humanities (NHU-501 & NHU-601)

rd 3 Year (V & VI Semester)

(Effective from Session 2015-2016)

## **NHU-501: Engineering Economics**

LTP

200

#### **Unit-1 Introduction to Engineering Economics and Managerial Economics**

Concept of Efficiency, Theory of Demand , Elasticity of Demand, Supply and Law of Supply indifference Curves, Budget Line, Welfare Analysis, Scope of Managerial Economics, Techniques and Applications of Managerial Economics.

#### **Unit-2 Market Structure**

Perfect Competitions Imperfect- Monopolistic, Oligopoly, duopoly sorbent features of price determination and various market conditions.

#### **Unit-3 Demand Forecasting and cost Estimation**

Characteristics of Forecasts, Forecasting Horizons, Steps to Forecasting, Forecasting Methods, Seasonal Adjustments, Forecasting Performance Measures, Cost Estimation, Elements of cost, Computation of Material Variances Break-Even Analysis.

#### **Unit-4 Management Aspects**

Functions of Management, Project Management, Value Engineering, Project Evaluation, Decision Making.

## **NHU-601: INDUSTRIAL MANAGEMENT**

LTP

200

#### **Unit-I**

**Introduction:** Concept, Development, application and scope of Industrial Management.

**Productivity:** Definition, measurement, productivity index, types of production system, Industrial Ownership.

#### **Unit-II**

**Management Function:** Principle of Management – Time and motion study, work simplification – process charts and flow diagrams, Production Planning.

#### **Unit-III**

**Inventory Control:** Inventory, Cost, Deterministic Models, Introduction to supply chain management.

#### **Unit-IV**

**Quality Control:** Process control, SQC, Control charts, Single, Double and Sequential Sampling, Introduction to TQM.