

Tribhuvan University  
**Faculty of Management**  
**Office of the Dean**



Course detail of  
BBA (Bachelor of Business Administration) 3<sup>rd</sup> Semester

March 2023

# ACC 202: Cost and Management Accounting

BBA 3<sup>rd</sup> Semester

*Credits: 3*

*Lecture Hours: 48*

## **Course Objectives**

The objectives of the course are to provide the students with in-depth knowledge of cost and management accounting in order to enable them to develop, arrange and classify cost information required for decision making for maximizing the profit. The course further aims at developing a sound base for higher study in accounting besides in practical knowledge required by the middle level managers to handle cost information independently.

## **Course Description**

This course contains conceptual and theoretical foundation of cost and management accounting ; It also comprises classification and segregation of cost, accounting for material and labour, allocation, apportionment and absorption of overhead cost, costing in different situations such as service costing, income statement under variable and absorption costing techniques, standard costing system with material and labour cost variance, flexible budgeting under different levels of activities, overhead cost variance and functional budgeting.

## **Course Details**

### **Unit 1: Conceptual Foundation**

**2 LHs**

Cost accounting and management accounting; Meaning, objectives, advantages and limitations of cost and management accounting; Limitations of financial accounting; Similarities and dissimilarities in financial, cost and management accounting

### **Unit 2: Cost Concept and Cost Classification**

**4 LHs**

Concept, importance and classification of cost: basic concept of cost and expense; cost classification: based on function, behavior, controllability, decision making, time of recording, planning and control, period and product cost;  
Cost segregation and estimation: concept and methods of cost segregation: i) Two point method ii) Least square method and iii) Estimation of cost

### **Unit 3: Accounting for Materials**

**4 LHs**

Materials/Inventory: Concept, reasons and objectives for holding material/inventory. Inventory control: Meaning, importance and techniques; Economic order quantity: concept, techniques, formula and trial & error approaches-considering discount under certainty condition; Re-order level, maximum stock level, minimum stock level, average stock level, danger level and safety stock; Concept and techniques of perpetual inventory system; Stock control through ABC analysis and just in time inventory: concept, advantages and limitations.

**Unit 4: Accounting for Labour Cost****3 LHs**

Labour Cost: Concept and need for control of labour cost; Remuneration without premium plan: Features of good remuneration system, time and piece wage system; Remuneration with premium Plan: Features of premium plan, premium bonus scheme- Halsey and Rowan Plan, Taylor's Differential Piece Rate, Gant's Task and Bonus Plan.

**Unit 5: Accounting for Overhead Cost****5 LHs**

Overhead Cost: Meaning, features, importance and classification; Apportionment and absorption of overhead: meaning and importance; apportionment and absorption of overhead cost based on volume, direct labour hours and direct machine hours.

**Unit 6: Costing in Service Sectors****6 LHs**

Service Costing: Concept, features and scope of service costing; Preparation of cost sheet for transport service for passenger, hospital, hotel and restaurant services, limitations of service costing.

**Unit 7: Accounting for Profit Planning****8 LHs**

Variable Costing and Absorption Costing: Concept, features, importance and preparation of income statement under variable costing and absorption costing; Over and under absorption of fixed manufacturing overhead and adjustment; Limitations of variable costing and absorption costing; Reconciliation of profit or loss between absorption and variable costing techniques showing the causes of differences.

Cost Volume Profit Analysis: Meaning, importance; assumptions and limitations of CVP analysis; Contribution margin or ratio, profit volume ratio; Break even analysis using contribution margin, algebraic approaches; Break-even-analysis: under various situations: changes on selling price, fixed cost, variable cost, multi-products situations, margin of safety and determination of selling price to realize desired profit ; Advantages and limitations of break even analysis.

**Unit 8: Cost Accounting for Planning and Control****12 LHs**

Standard Costing: Concept of standard cost and standard costing, features, application, advantages and limitations; Difference between standard and budget.

Variance Analysis; Material variances: Concept and calculation of cost, price, usage, mix and yield variances; Labour variances: Concept and calculation of cost, efficiency, rate, mix, idle time and yield variances.

Overhead Cost Variance: Concept and calculation of capacity, efficiency and spending variances.

Budget: concept, features and importance of budget; Types of budget: sales budget, production budget, material budget & merchandize purchase budget, labour budget, manufacturing overhead budget, cost of goods manufactured budget, selling/distribution & administrative expenses budget and cost of goods sold budget.

Fixed and Flexible Budgeting: Concept and importance of fixed and flexible budgets; Difference between fixed and flexible budgets; Flexible budgeting for overhead cost control on activity levels and budget allowance for actual level attained.

### **Unit 9: Short term Decision Making**

**4 LHs**

Concept, need and objectives of short term decisions in business; Cost concept in decision making: Relevant and irrelevant costs, avoidable and unavoidable costs, opportunity cost; Types of decisions: Drop or Continue, Special Offer/Order and Make or Buy

### **Suggested Readings**

Atkinson, A. A., Kaplan, R. S., Matsumura, E.M., Young, S.M & Kumar, G. A. (2012).

*Management Accounting /6e*. New Delhi: Pearson Education Pvt. Ltd.

Garrison, R. H. & Noreen, E. W. (2017). *Managerial Accounting* McGraw-Hill Companies, Inc.

Lynch , R.M. & Williamson, R.W. *Accounting for Management Planning & Control*, Tata McGraw Hill Co.

Pillai, R.S.N. & Bagavathi (2017). *Cost Accounting* New Delhi: S. Chand and Company Ltd.

# **ENG 203: Business Communication**

BBA 3rd Semester

*Credits: 3  
Lecture Hours: 48*

## **Course Objectives**

The course seeks to enable students to explore communication theories and models to determine how to communicate effectively in business settings, develop awareness and skills of structuring information, study different modalities of business communication, make effective use of business etiquette with non-verbal communication skills, identify different principles and approaches to oral and written communication in develop skills for professional presentations, adapt to new ways of communication with the help of latest technology, understand and use appropriate style and tone in spoken as well as written texts be familiar with the language used in conducting meetings and prepare reports based on the discussion in the meetings, write memos, letters, and other business communications, apply formal structure and develop organization in writing memos, proposals, reports, and the like and learn the art of using essential rhetorical techniques for developing effective communication.

## **Course Description**

This course provides the principles of effective communication and methods of applying them in organizations. It provides an understanding of communication practices and prepares readers for their assignments in the corporate world. The course includes important topics like communication in general and business communication in particular, the communication process, interpersonal communication, oral communication, writing of proposals and reports, technology-enabled communication, and presentations among others. This course includes techniques for developing practical solutions to making communication in the business context more effective. This course seeks to enhance students' cross-cultural understanding and communicative competence in varied contexts. Special attention to be given to Nepali contexts.

## **Course Details**

### **Unit 1: The Communication Process**

- Basics of communication
- Theories and principles of communication
- Communication methods, modes, and systems
- Writing process
- Importance of communication

- Barriers to communication

### **Unit 2: Business Communication**

- What is business communication?
- History of business communication
- Nature of communication
- Why business communication?
- Functions and importance of business communication
- Components of business communication
- Types of business communication

### **Unit 3: Skills and Values in Business Communication**

- Communication skills
- Organizational communication skills
- Interpersonal communication skills
- Leadership and communication skills in leadership
- Professionalism in business communication
- Writing and listening skills
- Ethical values
- Cross-cultural sensitivities

### **Unit 4: Writing Electronic and Other Messages**

- Memos
- Notices
- Letters
- Emails
- Blogs
- Advertisements
- Press releases
- Business plans
- Grants
- Proposals
- Reports

### **Unit 5: Oral Communication**

- Enhancing oral communication
- Presentation strategies and soft skills
- Telephone calls
- Using nonverbal communication
- Conversations and negotiations

### **Unit 6: Visuals and Nonverbal Communication**

- Using visual aids
- Pictures
- Charts
- Graphics

### **Unit 7: Communication in Career Planning**

- Planning and conducting a job search
- Résumés, references, and cover letters
- Group discussion and interview

### **Teaching Method**

The suggested method of teaching is to engage students in practicing communication skills, especially in groups. It is desirable to take local examples and case studies to make the content alive and then lead students to the writing task, i.e. guide the students to practice specific skills of language knowledge necessary for communication in business. As far as possible, visits to business houses, short internships and arranging talks by leaders in the field will enhance students' knowledge and communicative competence. It is recommended to take examples from Nepali contexts as far as practicable.

### **Evaluation**

The examinations will cover the materials specified in the course contents, and evaluate students' competence in the language skills including a range of tasks, and their ability to use English in a variety of business contexts with ease and accuracy.

### ***Suggested Readings***

- Thapa, Anirudra. *Business Communication: Principles and Applications*. Kathmandu: Asmita, 2021.
- Adhikari, Dharma, I. Hugh Holmes, Tika Lamsal, and Mike Sobiech. *Business Communication: Theory and Practice*. Kathmandu: Buddha Publications, 2020.

- Raman, Meenakshi, and Sangeeta Sharma. *Professional Communication*. 3<sup>rd</sup> ed., Oxford UP, 2017.
- Mukerjee, Hory Sankar. *Business Communication: Connecting at Work*. 2<sup>nd</sup> ed., Oxford UP, 2016.
- **Oxford Advanced Learner's Dictionary of Current English**. 10th ed., Oxford UP, 2020.
- Guffey, Mary Allen, and Dana Loewy. *Essentials of Business Communication*. 11th ed., Cengage Learning, 2019.
- Holmes, Hugh I. *English for Business Studies-I*. Buddha Publications, 2019.
- **Longman Business English Dictionary**. 2nd ed., Longman, 2018.
- Bovee, C.L., and John Thill. *Business Communication Essentials*. 7th ed., Pearson, 2016.
- Hartley, Peter, and Peter Chatterton. *Business Communication*. 2<sup>nd</sup> ed., Routledge, 2015.
- Taylor, Shirley. *Communication for Business: A Practical Approach*. Pearson, 4<sup>th</sup> ed., 2015.
- McKeown, Arthur. *Professional English in Use: Management*. Cambridge UP, 2011.
- Bargiela-Chiappini, Francesca, *The Handbook of Business Discourse*. Edinburgh UP, 2009.
- Raman, Meenakshi, and Prakash Singh. *Business Communication*. Oxford UP, 2006. Tourish, Dennis, and Owen Hargie. *Key Issues in Organizational Communication*. Routledge, 2004.
- Adair, J. *Effective Leadership: A modern guide to developing leadership skills*. Pan Books, 1986.

# **FIN 206: Fundamentals of Finance**

## **BBA 3rd Semester**

*Credits: 3*

*Lecture Hours: 48*

### **Course Objective**

This course Fundamentals of Finance aims to lay the foundation for understandings fundamental concepts and principles of finance. This course equips the students with fundamental tools and techniques of financial management to prepare them to resolve complex financial issues concerning business firms.

### **Course Description**

This course consists of the introduction to finance, financial environment, interest rates, time value of money, bond valuation, stock valuation, cost of capital, capital budgeting, and working capital.

### **Course Detail**

#### **Unit 1: Introduction to Finance**

**5 LHs**

Concept of finance; Finance functions, The financial goal; Finance in organizational structure; Finance and related disciplines.

#### **Unit 2: Financial Environment**

**4 LHs**

Overview of financial environment; Financial instruments, Financial markets: Functions and types of financial markets; Financial institutions: Depository and non-depository financial institutions.

#### **Unit 3: Analysis of Financial Statements**

**6 LHs**

Financial statements and reports; Concept of financial statement analysis; Users of financial analysis; Tools of financial statements analysis; Need of financial ratio analysis; Types of financial ratios: liquidity ratios, asset management ratios debt management ratios, profitability ratios and market value ratios; Du-Pont equation; Comparative ratios and benchmarking; Uses and limitations of ratio analysis.

#### **Unit 4: Interest rates**

**6 LHs**

The cost of money; Interest rates levels; Determinants of market interest rates; Term structure of interest rates; Theories of term structure of interest rates; Shape of yield curve; Using the yield curve to estimate future interest rates; Macroeconomic factors influencing interest rates; and Interest rate and business decision.

#### **Unit 5: Time Value of Money**

**8 LHs**

Concept of time value of money; Cash flow time line; Future values and present values of a single cash flow; Computing the interest rate and the number of years;

Future value and present value of an ordinary annuity and annuity due; Computing annuity payments, periods and interest rates; Present value of perpetuities; Present value and future value of uneven cash flows; Semiannual and other compounding periods; Preparation of loan amortization schedule; Application of the concept of time value of money.

#### **Unit 6: Bond Valuation**

**5 LHs**

Meaning and key characteristics of bonds, Basic financial asset valuation model, Valuation of bonds: perpetual bonds, zero coupon bonds, coupon bonds with finite maturity, Bonds with semiannual coupons, required return and bond values, Changes in bond values over time, Bond yields: current yield, capital gain yield, yield to maturity and yield to call.

#### **Unit 7: Stock Valuation**

**5 LHs**

Meaning and key features of common stock, Common stock valuation: single and multiple holding periods, The dividend discount model: zero growth model, normal growth model, non-constant growth model, valuing the entire firm, Preferred stock: Features and valuation.

#### **Unit 8: Cost of capital**

**5 LHs**

Concepts and uses of cost of capital, Components of cost of capital: cost of debt, cost of preferred stock, cost of retained earnings, cost of new common stock, weighted average cost of capital; Factors affecting cost of capital.

#### **Unit 9: Working Capital**

**4 LHs**

Concepts of working capital; Types of working capital; Factors affecting the size of working capital; Working capital management and its significance; Operating cycle, cash conversion cycle and computing the amount of working capital requirement.

#### ***Suggested Readings***

Brigham, E. F. & Houston, J. F. *Fundamentals of financial management*. Delhi: Cengage Learning.

Ross, S. A., Westerfield, R. W. & Jordan, B. D. *Fundamentals of corporate finance*. New York: McGraw-Hill Irwin.

Van Horne, J. C., Wachowicz, J. R. & Bhaduri, S. N. *Fundamentals of financial management*. New Delhi: Prentice-Hall India Ltd.

# MGT 232: Leadership and Organizational Behavior

## BBA 3rd Semester

*Credits: 2*  
*Lecture Hours: 32*

### Course objectives

The major objective of this course is to introduce the basic concepts and application of Organizational Behavior (OB) and Leadership. It also aims to enhance the knowledge and approaches of OB and Leadership. The course provides students with an in-depth understanding of fundamental concept and understanding of organizational behavior and leadership.

### Learning Outcomes

Upon successful completion of this course, the students will be able to;

- Develop basic understanding of organizational behavior
- Apply different dimensions of organizational behavior in organizational system and procedures
- Understand the importance and basic concepts of leadership
- Know the issues and approaches of leadership and their importance for organizational success

### Learning Strategies

The faculty member / course instructor strictly follow the following learning strategies while teaching to the student

- **Quizzes/ Surprise Test:** Quizzes to be taken individually without prior information. The quizzes is to be taken using objective questions covering the related text chapter materials.
- **Project & Live Projects:** The students should work in team for producing live project report as a part of experiential learning. They should go to the field, collect real time data and develop report. They also should present it in the class within 10 minutes of each group.
- **Case analysis:** The students should submit analysis of the cases provided by the course instructor reflecting the text/ practice related problems, genesis of the problems. It may be presented in the class room.
- **Assignments:** The students tend to develop and deliver a presentation of 15 minutes on contemporary issues that are worthy enough. Home assignment in preparation of term paper can be provided.
- **Simulation:** The students need to participate in the activities that are set inside the class room. Course instructor/faculty should provide issues and make practice as in real life situation.
- **Term paper & Thematic review:** The Course instructor/faculty should provide issues that are importantly raised in the society and ask students to review related articles and develop the theme as the part of term paper and ask them to present in the class.
- **Oral Presentation:** The Course instructor/faculty should provide issues a day before and ask them to speak 5- 10 minutes without any supportive materials in the class

### Course Description

This course contains Introduction to organizational behavior, Perception and learning, Personality and job satisfaction, Organizational conflict and Stress Management, Introduction to leadership, Contemporary leadership theories and styles and leadership development etc.

## **Course Details**

### **Unit 1: Introduction to Organizational Behavior**

**6 LHs**

Concept of organizational behavior; Organizational behavior system; Levels of OB analysis; Basic assumptions of organizational behavior; Contributing disciplines to the field of organizational behavior; Mental process: beliefs, attitudes, values, needs, motives and behavior; Emotions and Cognitive dissonance; New challenges for manager in the field of OB.

### **Unit 2: Perception and Learning**

**4 LHS**

Concept of perception; Factors affecting perception; Attribution theory; Attribution errors; Perception and individual decision making; Concept of learning; Learning theories; Factors influencing learning; Behavior modification.

### **Unit 3: Personality and Job Satisfaction**

**4 LHs**

Concept of personality; Determinants of personality; Big Five Personality Traits; linking an individual's personality and values to the workplace; Major personality attributes influencing organizational behavior; Concept and role of job satisfaction; Measuring job satisfaction; Effects of job satisfaction on employees' performance.

### **Unit 4: Organizational Conflict and Stress**

**5 LHs**

Concept of organizational conflict; Functional and dysfunctional conflict; Approaches to conflict management; Resolving conflict through negotiation; Dynamics of intergroup conflict; Concept of organizational stress; Organizational causes of stress; approaches for managing stress; Stress and innovative work behavior of employees.

### **Unit 5: Introduction to leadership**

**4 LHs**

Understanding leaders and leadership; Leaders and managers; leadership effectiveness; Attributes of effective leaders; Developing leadership skills; Leadership taxonomy; Leadership and employees' innovative work behavior

### **Unit 6: Theories of Effective leadership & Contemporary Leadership Styles**

**7 LHs**

Contingencies Theories: Fiedler's contingency theory, Cognitive resource theory, Path goal theory, Situational leadership theory and Multiple linkage model; Contemporary leadership styles: Transactional leadership, Transformational leadership, Charismatic leadership, Value-based leadership, Spiritual and servant leadership, Boundary spanning & team leadership.

### **Unit 7: Leadership Development in Organization**

**2 LHs**

Concept of leader behaviors: supportive, directive, participative; Professional development to leaders: coaching, mentoring, counselling; Leadership development mechanisms: recruitment, training & learning, delegation, mentoring, experiential learning, 360-degree appraisal.

### ***Suggested Readings***

Arnold, H.J. & Fieldman, D.C. ***Organizational Behavior***. New York: McGraw Hill Book Company.

Dwivedi, R. S., ***Human Relations and Organizational Behavior: A Global Perspective***. New Delhi: Macmillan India Limited.

Newstorm, J. W., ***Organizational Behavior: Human Behavior at Work***, New Delhi: Tata McGraw\_Hill Publishing Company.

Robbins, S. P., ***Organizational Behavior***, New Delhi: Pearson.

Halder, U. K., ***Leadership and Team Building***, Oxford University Press New Delhi, India

Chalise, M. & Gautam, P., ***Leadership and Organizational Behavior***, KEC Publication, Kathmandu, Nepal

# **MGT 233: Seminar in Leadership & Organizational Behavior**

(BBA 3rd Semester)

*Credits: 1*

*Lecture Hours: 16*

## **Course Description and Objective**

This course aims to help the students to acquire in-depth knowledge of the literatures of leadership and organizational behavior mainly, theory and empirical evidences and to give the students practical experience by conducting a review based research project in emerging issues.

The emphasis of this course will be on recent contributions to theory and practice of leadership & OB within Nepal and globe. The course will cover articles, dissertation, project work, books etc. published in the areas of leadership & OB.

## **Learning Outcomes**

On successful completion of this course, students will be able to:

- Familiarize with theory and empirical evidences of nature of leadership & OB practices in contemporary organization;
- Examine theories and empirical evidences on leadership & OB and enhance their abilities; in conducting research in the areas
- Understanding the emerging issues of leadership and OB and contextualize in the Nepalese settings
- Aware the theories and research results in the area of leadership and OB;
- Impart the knowledge of theory, empirical evidences and applications in the issues of leadership and OB
- Develop review based paper as outcome of seminar in the different areas of leadership & OB

## **Learning strategies**

- The student will extensively review the conceptual paper/ theoretical paper / research paper on the basis of theoretical and empirical review
- Students need to prepare the paper with the close guidance of concerned teacher / course convener/faculty member
- Faculty member reviews and accepts or advises for revision of the review based paper
- Upon completion of review paper the student submits a final review paper to the faculty member at the department/campus
- Student should appear in seminar (presentation of review paper) that will be evaluated by concerned faculty member and other experts.
- Faculty member and expert jointly award the grades.

## **Seminar operationalization**

- **Theoretical orientation**

**6 LHs**

Introduction to workshop module (Article searching, article reading, drawing materials for seminar paper for presentation)

Introduction to issues/theme of seminar and concept of thematic review

- **Implementation of seminar** **6 HRs**
- **Thematic Review/ Development & presentation of paper** **4 HRs**

Faculty member/course instructor may give issues related to OB and leadership. Students should review number of related articles/papers on given issues and develop the slides for presentation and thematic paper as outcome of seminar.

### **Evaluation**

A student is required to undertake a review based research assignment and prepare a seminar paper at the end of the session. The seminar paper must be presented in the format as prescribed by concerned faculty/ course instructor. Evaluation of the seminar paper & presentation shall be based on the following bases:

- Written Report ( Seminar paper): 70 %
- Presentation: 30%

### **Content/ issues elaboration**

Project report/review paper is the final output of the seminar in leadership and OB course. The following contents will be

- a) Contemporary issues of Leadership and OB
- b) New challenges for managers in OB
- c) Effects of job satisfaction on employee's performance
- d) Current issues in leadership and OB
- e) Conflict management in organization
- f) Transformational leadership and employee's performance
- g) Leadership development programs in Nepalese organization
- h) Culture & ethnic differences
- i) Workforce diversity and diversity management
- j) Others

### **References**

Articles, critical books, seminar papers, and dissertations, published internationally, regionally and locally in the area of management.

# STT 201: Business Statistics

BBA 3rd Semester

*Credits: 3*

*Lecture Hours: 48*

**Nature of the course: Theory and Practical with EXCEL (60% + 40%)**

## **Course Objectives**

The principal objective of Business Statistics is for students to describe data and make evidence based business decisions making using descriptive and inferential statistics that are based on well-reasoned statistical arguments. The course will cover the basic tools used to describe data for the purposes of transforming data into information. In addition, the course will present the fundamentals of statistical inference showing how it is possible to examine a small subset of data to reach conclusions about the larger set of data. The statistical tools should be introduced from an applied perspective using business related examples. Microsoft Excel software will be used throughout the course to aid in statistical analysis.

## **Course Description**

Statistics in business and management, describing data using graphs and tables. Numerical measures: central tendency, dispersion, skewness and kurtosis. Probability: laws of probability, conditional probability. Probability distribution: discrete probability distribution and continuous probability distribution. Sampling theory: sampling techniques, sampling and non-sampling errors. Estimation: point and interval estimates. Hypothesis testing: test of significance for large samples. Linear correlation and regression.

## **Course Details**

### **Unit 1: Describing Data using Graphs and Tables**

**4 LHs**

Uses and scope of statistics in business and management, Frequency distribution, Stem-and-leaf plots, Diagrams (Simple bar diagram, Sub-divided bar diagram, Multiple bar diagram, and Pie-chart) and graphical presentation of frequency distribution – Histogram, Ogive curve, Problems using Excel.

### **Unit 2: Describing Data Using Numerical Measures**

**9 LHs**

Measures of central tendency (Mean, Median and Mode), Partition values (Quartiles, Deciles and Percentiles); Measures of variation (Range, Inter quartile Range, Quartile deviations, Standard deviation); Variance and Coefficient of Variation; Measurement of skewness (Karl Pearson coefficient of skewness and Bowley coefficient of skewness); Measurement of kurtosis (Percentile coefficient of kurtosis); Five number summery, Box-and -Whisker plot, Problems using Excel.

**Unit 3: Simple Linear Correlation Analysis****5 LHs**

Introduction, Scatter plot, Karl Pearson's correlation coefficient including bi-variate frequency distribution, Coefficient of determination, Test of significance of sample correlation coefficient using probable error, Spearman's rank correlation coefficient, Problems using Excel.

**Unit 4: Simple Linear Regression Analysis****4 LHs**

Introduction, Simple linear regression models, Assumptions of linear regression model, Line of best fit, Linear regression model by least-squares method, Interpretation of regression coefficients, Properties of regression coefficient, regression coefficient for bi-variate frequency distribution, Problems using Excel.

**Unit 5: Probability****4 LHs**

Introduction, Sample space and events, Probability, Laws of probability, Conditional probability, Problems using Excel.

**Unit 6: Probability Distributions****6 LHs**

Introduction, Discrete probability distribution (Binomial distribution and Poisson distribution), Continuous probability distribution (Normal distribution), Problems using Excel.

**Unit 7: Sampling Theory****3 LHs**

Introduction, Population and sample, Objectives of sampling, Sampling techniques, Sampling and non-sampling errors, Standard error, Concept of central limit theorem.

**Unit 8: Estimation****6 LHs**

Introduction, Properties of good estimator (Consistency, Unbiasedness, Efficiency and Sufficiency), Point and interval estimates, Level of confidence, Confidence interval estimates for mean and proportion, Determination of sample size for mean and proportion, Problems using Excel.

**Unit 9: Introduction to Hypothesis Testing****7 LHs**

Introduction, Steps of hypothesis testing, Level of significance, Critical region, One tailed test and two tailed test, Hypothesis testing using critical value and p-value approaches, Test of significance for large samples (Z-test): Test of significance of a single mean and difference between two means, Test of significance of a single proportion and difference between two proportions, Problems using Excel.

***Suggested Readings***

- Davis, G. and B. Pecar. *Business Statistics using EXCEL*, Oxford University Press.
- Levine, D.V., D.F. Stephan and K. A. Szabat. *Statistics for managers using MS excel*, Pearson.
- Linda, H. and F. John. *Applied Statistics for Business and Management using Microsoft Excel*, Springer.
- Trevor, W. *Applied Statistics: Methods and Excel-Based Application*, JUTA Academics.