# APPLIED MATHEMATICS FOR BUSINESS BBA-102 - B

#### **Course contents**

### Unit 1: Set Theory L. H. 6

Review of the following: Set and set membership, Inclusion relation and equality of sets; Universal set; Finite and infinite sets. Set operations: (union, Intersection, Difference, Complement and Symmetric difference). Fundamental law of set operations; Partition of set; Cartesian product of sets. Cardinal number of finite set and related problems.

# Unit 2: Symbolic Logic L. H. 4

Statement (Proposition); Truth-value and truth table; compound statement; conditional and biconditional statement; combination of statements by using "and", "unless", "either-or" and "neither-nor". Negation, Converse, Inverse, Contradiction and Contra positive of Statements, Tautology.

### Unit 3: Function, Limit and Continuity L. H. 10

Function, Construction of Functions; Linear and Quadratic Foundations; Absolute value function; Step function, Exponential function; Logarithmic function; Convex set and convex function; Zeros of a function; Algebraic and Graphic methods of finding zeros of linear and quadratic functions, Break-even analysis limit of a function; Continuous function; Monotonic function; Inverse function.

# **Unit 4: Differentiation (Excluding Trigonometric Function)**

Definition of derivative; Right hand and left hand derivative; Basic laws of derivative; The chain rule; Derivative of exponential and logarithmic function; Higher order derivative; Application of derivative.

#### **Unit 5: Maxima and Minima of Functions**

Local maxima and local minima of a function; global maximum and minimum; Application of maxima and minima to business related problems.

### Unit 6: Integration (Excluding Trigonometric Function) L. H. 4

Integral; Integration formulate; Integration by parts; Definite integral; Application of integration Unit 7: Matrix and Determinants L.H. 10

Matrix; Special types of matrices, Addition of matrices; Multiplication of matrix by scalar and matrix multiplication; Determinant of square matrix; Determinant of product of two matrices; Properties of determinant and related problems; Transpose of a matrix; Adjoint of a square matrix; Inverse of a square matrix; Properties of inverse of a matrix; Rank of a matrix.

### Unit 8: Linear Equations L. H. 5

System of linear equation; Consistent and inconsistent system; Test Consistency; Solution of system of linear equations; Unique solution and infinite solutions; Solution by Row-equivalent method, inverse matrix methods and Cramer's rule up to three variables.

- 1. Raghavachari, M.; **Mathematics for Management**; Tata McGraw-Hill Publishing Company Limited, New Delhi.
- 2. Bajracharya, B. C.; **Business Statistics and Mathematics**: M. K. Publishers and Distributors, Kathmandu.
- 3. Kolham, B.; Busy, R. C.; Ross, S. C.; **Discrete Mathematical Structures**: Prentice Hall of India Pvt. Ltd. New Delhi.

# BUSINESS APPLICATION OF COMPUTERS BBA-104

# **Objectives**

To provide students with basic concepts of computers and get them used to analyze and interpret business problems through computer application.

#### **Contents**

# Unit 1: Introduction to Computer L. H. 6

Concept of characteristics of computers, computer generations, computer applications, classification of computers- Digital and analog computers.

### Unit 2: Computer Organization L. H. 6

Anatomy of computer, Arithmetic and logic unit, control unit. Memory, types of memory, inputoutput devices, primary and secondary storage device, central processing unit. Printers; Dot Matrix Printer, Laser Printer, Hardware and Software.

### Unit 3: Data Representation L. H. 8

Integers, real numbers, string, bits and bytes, positional and non-positional number systems, Decimal, Binary, Converting from one number system to another, Binary addition.

# Unit 4: The Operating System and the User Interface L.H. 10

Introduction to Window, The Desktop, Icons, Taskbar & start button, Programs Running Windows, Windows control buttons, menus and dialog boxes, running programs, managing the files.

# Unit 5: Word Processing (MS-Word) L. H. 8

Entering Text, Navigation through a document, Editing text, Formatting Text.

### Unit 6: Spread Sheets (MS-Excel) L. H. 7

Introducing, creating a worksheet, organizing the data, designing the worksheet, creating formula and editing the worksheet, Adding charts and analyzing the data shorting and printing the worksheet. Financial Functions, Statistical Functions, Mathematical Function.

#### Unit 7: Presentation (MS-Power Point) L. H. 3

Organization Chart, Slide and presentation of project work.

#### **Text Books**

- 1. Kalicharan Noel: **An Introduction to Computer Studies**, Cambridge University Press; London. Modern Micro Economic. MacMillan Press Ltd., London
- 2. MS Word/Excel, PowerPoint Books.

#### **Reference:**

- 1. Rajaraman V.: Fundamentals of Computers, Prentice-Hall of India, New Delhi.
- 2. Peter Norton's **Introduction Computer Data** McGrow Hill Publishing Company Limited, New Delhi
- 3. Jain R. K. Conventional and Objective Type on Computer, Khanna Publisher Delhi.

# BUSINESS ENGLISH BBA-102-A

# **Course Description**

This course comprises two basic components:

- 1. Business English Component
- 2. Literary Component

#### **Course Content**

# **Business English Component**

Unit I Management

Unit II Work and Motivation

Unit III Management and Cultural Diversity

Unit IV Marketing

Unit V Advertising

Unit VI Stocks and Shares

Unit VII Market Structure and Competition

# **Literary Component**

Unit I We are all scientist - T. H. Huxley

Unit II Third Thoughts - E. V. Lucas

Unit III Love is Fallacy - Max Shulman

Unit IV The Great Answer - Fulton Oursler

Unit V Balled of the Landlord - Langston Hughes

Unit VI Holy Sonnet 14 - John Donne

Unit VII Sorry, Wrong Number - Lucille Fletcher

- 1. Mackenzie, lan 1997, **English for Business Studies**, Cambridge: Cambridge University Press (For Units 1-7)
- 2. Ed. Shreedhar Lohani et. Al Critical and Creative Thinking
- 3. Ed. Lohani and Adhikari, 1997 **Joys of Reading**, MK Publishers
- 4. Ed. Moti Nissani, Shreedhar Lohani, Adventures in English Ekta Books Kathmandu

# FINANCIAL ACCOUNTING-I BBA-101

#### **Course Contents**

### Unit 1: An Overview of Financial Accounting L.H.5

Accounting as an Information System and Language of Business; Users of Accounting Information; Functions and Limitations of Financial Accounting; Principal Financial Statements; Elements of Financial Statements; Accounting Equation, Analysis of Transactions, Accounting Cycle and Accounting Methods(Cash Basis and Accrual Basis).

#### Unit II: Basic Accounting Concepts and Conventions L.H.3

- a. Basic Accounting Concepts; Business Equity Concept, Money Measurement Concept, Dual-aspect (Accounting Equation Concept) Going Concern Concept, Accounting Periods Concept, Historical Cost Concepts; Realization Concept, Accrual Concept, and Matching Concept.
- b. Basic Accounting Conventions: Conservatism (Prudence), Full disclosure, consistency and Materiality.
- c. Generally accepted accounting Principles (GAAP) and Financial Reporting Environment.

#### **Unit III: Preparation of Financial Statement L.H.11**

- a. Rules for Debit and Credit
- b. Journalizing, Posting in Ledgers ('T' Accounts and Self Balancing Ledgers)
- c. Preparation of Unadjusted Trial Balance
- d. Concept of Capital and Revenue Items
- e. Closing Entries
- f. The Income Statement (P/L A/C)
- g. The Statement of Retained Earnings
- h. The Balance Sheet
- i. Use of Work sheet to Complete Accounting Cycle

#### Unit IV: Accounting for Inventory L. H. 5

- a. Inventory Systems-Periodic and Perpetual
- b. Inventory Valuation Methods-FIFO, LIFO, Weighted Average
- c. Impact of Different Methods on Cost of Goods Sold and Profit.

#### Unit V: Accounting for Cash L. H. 3

- a. Cash Book and Bank Statement
- b. Bank Re-conciliation Statement

### Unit VI: Accounting for Fixed Assets and Depreciation L. H. 5

- a. Acquisition of Plant, Property and Equipments
- b. Depreciation Methods- Straight Line Method and Written Down Value Method
- c. Disposal of Fixed Assets

#### Unit VII: Cash and Funds Flow Statements L.H. 10

- a. Preparation of the Statement of Cash Flow (Direct and Indirect Method)
- b. Preparation of the Statement of Funds Flow (working Capital Basis)

### Unit VIII: Corporate Reports and Analysis L. H. 6

- a. Concept of Corporate Annual Reports
- b. Analysis of Corporate Common Size Statements
- c. Ratio Analysis- Liquidity, Solvency, Efficiency (Turnover), and Profitability
- d. Uses of Ratios for Different Stakeholders' Point of View

- 1. Porter, Gary A. and Norton, Curtis L.: **Financial Accounting: The Impact on Decision Makers,**Harcourt College Publishers, Orlando.
- 2. Narayanswamy, R.: Financial Accounting: A Managerial Perspective, Prentice Hall of India (P.) Ltd., New Delhi.
- 3. Sharma Narendra: **Financial Accounting, Buddha: Financial Accounting**, Buddha Academic Enterprises (P) Ltd. Kathmandu (1<sup>st</sup> Edition).

# ORGANIZATIONAL MANAGEMENT BBA-103

### **Section A: Organization**

# Unit 1: Organization and Goals L. H. 4

Meaning, Characteristics of Organization; Organizational Goals, Features of Effective Organizational Goals, Goal Formation Process and Approaches. Goal Succession and Displacement. Importance of Organization

# Unit 2: Organization Classification L. H. 2

Business Organization, Non-profit Organization, Mutual Benefit Organization, Common weal Organization.

### **Section B: Management**

### Unit 3: Introduction L. H. 4

Definition of Management, Characteristics and Principles of Management, Function of Management, Managerial Hierarchy, Roles and Skills; Challenges of Management.

## Unit 4: Evolution of Management Thought L. H. 8

Historical Background, Classical Thoughts, Behavioral School, Management Science School, System Theory, Contingency Theory.

# Unit 5: Planning & Decision Making L. H. 5

Definition & Purpose of Planning, Types of Planning, Steps of Planning, Hierarchy of Plans, Planning Tools; Decision Making Process, Decision Making Styles, Decision Alternatives, Barriers to Decision Making.

# Unit 6: Organizing & Staffing L. H. 8

Define Organizing; Types of Organization Structure-Line, Line & Staff, Functional, Divisional, Matrix; Delegation of Authority, Span of Management, Decentralization; Staffing-Concept & Importance, Staffing Process.

### Unit 7: Leading L. H. 6

Meaning, Elements of Leadership, Theories, Leadership and Managerial Effectiveness, Motivation, The Hierarchy of Needs Theory, The Motivation-Hygiene Approach to Motivation.

#### Unit 8: Control L. H. 7

Meaning, Importance of Control, Control Process, Types of Control, Control Techniques.

#### Unit 9: Emerging Concepts L. H. 4

Participative Management, Quality Circle-TOM, Time Management, Social Responsibility & Ethics of Business.

- 1. **Essential of Management**, Harold Koontz & Hinge Weihrich
- 2. Management, Stephen P. Robbins & Marry Coulter
- 3. Fundaments of Management, Stephen P. Robbins & David A. Decenzo
- 4. Management, Stoner, Freeman & Gilbert
- 5. Management, Robert Kreitner
- 6. Organization Management in Nepal, Dr. Govinda Ram Agrawal