MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB

(Formerly West Bengal University of Technology)

Syllabus for Bachelor in Supply Chain Management

Effective from the Academic Year 2019-20

FIRST SEMESTER

Semester – 1st **Credit Points– 4**

Paper: English **Total Contact Hours - 40**

Paper Code: BBA (N) - 101

Module I: Grammar and Vocabulary (10L) **Grammatical & Structural Aspects**: Parts of Speech, Types of Sentences, Tense, Voice, Clause, Preposition, Degrees of Comparison, Subject Verb Agreement, Modals or Auxiliaries Simple/ Compound/Complex Sentences and Transformation of Sentences, Narration. **Vocabulary:** Synonyms, Antonyms, Homonyms, Homophones, Idioms, Phrasal verbs, One Word Substitution **Error Correction :** Identifying & Analyzing Grammatical Errors Pertaining to Usage of Verbs, Adjectives, Adverbs, Pronouns and Errors in Spelling & Punctuation
Module II: Reading (6L) **Comprehension:** Unseen passages, Contextual Meaning of Words, Précis **Interpretation & Summarizing:** Interpretation of Visual Data in the Form of Tables, Graphs, Charts, Pie Charts and so on. Speed Reading, Understanding and Interpreting Business-Related Correspondences
Module III: Writing (15L) **Letter Writing**: Formal and Informal Letters, Business Letters, Letter to the Editor, Complaint Letter, Invitation Letters - Accepting & Declining Invitations, Making Enquiries, Placing Orders, Asking & Giving Information, Registering Complaints, Handling Complaints, Drafting Notices, Drafting Advertisements; Job Applications. **Paragraph and Essay Writing**: Paragraph and Essay Writing on Recent Topics.
Module IV: Listening and Speaking (9L) **Interactive Communication**: Introducing Self, Greetings, Conversations, etc. **Pronunciation:** Appropriate Stress, Intonation, Clarity, Business Etiquettes, Impromptu Speech, Debate, Role Play, Group Discussion, Presentation, Listening and Understanding Spoken and Formal English.

Suggested Readings:

1. A. Ashley: A Handbook of Commercial Correspondence, OUP
2. M. Monipatty: The Craft of Business Letter Writing, Tata McGraw Hill
3. N. Gupta (Ed.): English for All, Macmillan
4. English Vocabulary Made Easy: The Complete Vocabulary Build Up for Improving English by Shrikant Prasoon
5. J. C. Nesfield : Manual of English Grammar and Composition

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB

(Formerly West Bengal University of Technology)

Syllabus for Bachelor in Supply Chain Management

Effective from the Academic Year 2019-20

Credit Points– 4

Paper: Basics of Mathematics **Total Contact Hours - 40**

Paper Code: BBA (N) - 102

Module-I

1. The Number System – Positive and Negative Integers, Fractions, Rational and Irrational Numbers, Real Numbers, Problems Involving the Concept of Real Numbers. **[2L]**

2. Basic Algebra – Algebraic Identities, Simple Factorizations; Equations: Linear and Quadratic (in Single Variable and Simultaneous Equations).Surds and Indices; Logarithms and Their Properties (Including Change of Base); Problems Based on Logarithms. **[3L]**

3. Set Theory – Introduction; Representation of Sets; Subsets and Supersets; Universal and Null Sets; Basic Operations on Sets; Laws of Set Algebra; Cardinal Number of a Set; Venn Diagrams; Application of Set Theory to the Solution of Problems. **[4L]**

4. Functions – Elementary idea of functions; Domain of a Function; Composition Functions; Classification of Functions: Polynomial, Rational, Exponential and Logarithmic Functions**.** **[3L]**

5. Quadratic Functions and Theory of Quadratic Equations – Solution of the Quadratic Equation $ax2+bx+c=0, a\neq0$; Nature of the Roots of a Quadratic Equation; Sum and Product of roots; Relation Between Roots; Condition for the Existence of a Common Root; Forming Quadratic Equation with given Roots. **[3L]**

6. Simple Interest and Compound Interest – Concept of Present Value and Amount of a Sum. **[3L]**

7. Profit, Loss and Discount **[2L]**

8. Speed, Time and Distance **[1L]**

9. Time and Work **[1L]**

10. Ratio, Proportion **[2L]**

11. Sequences and Series – General Idea and Different Types of Sequences; Arithmetic and Geometric Rogressions; Arithmetic and Geometric Means; Arithmetic and Geometric Series. **[4L]**

12. Permutations and Combinations – Fundamental Principle of Counting; Factorial Notation.
Permutation: Permutation of n Different Things; of Things not all Different; Restricted Permutations; Circular Permutations. **[4L]**

Module-II

1. Fundamentals – Rectangular Cartesian Coordinates; Polar Coordinates; Distance Formula; Section formula (Internal and External Sections); Expressions for the Centroid and Incentre of a Triangle; Area of a Triangle in Terms of the Three Vertices. **[4L]**

2. Locus – Definition, Concept of St. Line, Equation to the locus; Method of obtaining the equation to the locus. **[4L]**

Suggested Readings:

1. Pal and Das: BBA Mathematics (Vol-I), U.N. Dhar and Sons Pvt. Ltd.
2. Sancheti & Kapoor: Business Mathematics; Sultan Ch and & Company
3. R. S. Soni: Business Mathematics – Pitambar Publishing House
4. S. N. Dey: Mathematics, Chaya Prakashoni.

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB

(Formerly West Bengal University of Technology)

Syllabus for Bachelor in Supply Chain Management

Effective from the Academic Year 2019-20

Semester – 1st **Credit Points– 4**

Paper: Fundamentals of Statistics **Total Contact Hours - 40**

Paper Code: BBA (N) - 103

Module-I:

1. Introduction: Statistics as a Subject, Functions, Importance and Limitations of Statistics, Census and Sample Investigation, Descriptive and Inferential Statistics. **[2L]**

2. Collection, Editing and Presentation of Data: Primary Data and Secondary Data, Methods of Collection, Scrutiny of Data. Presentation of Data: Textual and Tabular Presentations, Construction of a Table and the Different Components of a Table, Diagrammatic Representation of Data: Line Diagrams, Bar Diagrams, Pie Charts and Divided-Bar Diagrams. **[3L]**

3. Frequency Distributions: Variables and Attributes, Frequency Distribution of An Attribute; Discrete and Continuous Variables, Frequency Distributions of Discrete and Continuous Variables, Diagrammatic Representation of a Frequency Distribution: Case of An Attribute, Case of a Discrete Variable: Column Diagram, Frequency Polygon and Step Diagram, Case of a Continuous Variable: Histogram and Ogive, Frequency Polygon. **[5L]**

Module-II

1. Measures of Central Tendency: Definition and Utility, Characteristics of Average, Different Measures of Average: Arithmetic Mean, Median, Mode, Partitional Values: Quartile, Percentile and Deciles. Geometric and Harmonic Mean. Choice of a Suitable Measure of Central Tendency. **[7L]**

2. Measures of Dispersion: Meaning and Objective of Dispersion, Characteristics of a Good Measure of dispersion, Different measures of dispersion – Range, Quartile deviation, Mean deviation, Mean Absolute Deviation, Standard Deviation; Comparison of the Different Measures of Dispersion. Measures of Relative Dispersion: Coefficient of Variation. **[7L]**

3. Moments, Skewness and Kurtosis: Moments: Different Ways to Calculate Moments.

Skewness: Measures of Skewness, Kurtosis and its Measures. **[3L]**

Module-III

1. Correlation Analysis: Analysis of Bivariate data. Correlation Analysis – Meaning of Correlation: Scatter Diagram, Karl Pearson's Coefficient of Linear Correlation, Calculation of the Correlation Coefficient from Grouped Data, Properties of the Correlation Coefficient Advantages and Limitations of the Correlation Coefficient, Idea of Rank Correlation; Spearman's Rank Correlation Coefficient(without tie) **[6L]**

2. Regression Analysis – Two Lines of Regression: Some Important Results Relating to Regression Lines, Calculation of Regression Coefficients, Relation Between Regression Coefficient and Correlation Coefficient, Identification Problem. **[4L]**

Module-IV

1.Analysis of Time Series: Objective of time series analysis; Causes of variations in time series data, Components of a time series, Additive Models, Multiplicative Models, Moving averages method and method of least squares; Measurement of secular trend. **[3L]**

Suggested Readings:

1. N.G Das: Statistical Methods (Volume I): Tata McGraw-Hill.
2. A.M Goon, M.K Gupta & B, Dasgupta: Basic Statistics : World Press
3. G. C. Beri : Statistics for Management: Tata McGraw- Hill
4. Bharat Jhunjhunwala: Business Statistics, S. Chand Publishing
5. V.K. Kapoor & S.C. Gupta: Fundamentals of Mathematical Statistics, Sultan Chand & Sons.

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB

(Formerly West Bengal University of Technology)

Syllabus for Bachelor in Supply Chain Management

Effective from the Academic Year 2019-20

Credit Points– 4

Paper: Economics (Micro) **Total Contact Hours - 40**

Paper Code: BBA (N) - 104

Module-I:

1. **Introduction:** Basic Problems of an Economy, Working of Price Mechanism and Resource Allocation. **[2L]**
2. **Elasticity of Demand:** Concept and Measurement of Elasticity of Demand, Price, Income and Cross Elasticities **[4L]**
3. **Average Revenue:** Marginal Revenue, and Elasticity of Demand, Determinants of Elasticity of Demand. **[2L]**

Module-II

1. Production Function: Law of Variable Proportions, Ridge Lines. Isoquants, Economic Regions and Optimum Factor Combination. Expansion Path, Returns of Scale, International and External Economies and Diseconomies of Scale. **[4L]**

2. Theory of Costs: Short-Run and Long Run Cost Curves – Traditional Approaches Only. **[3L]**

Module-III

Market Structures:

1. **Perfect Competition:** Characteristics, Profit Maximization and Equilibrium of Firm and Industry, Short-Run and Long Run Supply Curves, Price and Output Determination, Practical Applications. **[6L]**
2. **Monopoly:** Characteristics, Determination of Price under monopoly, Equilibrium of a Firm, Comparison Between Perfect Competition and Monopoly, Price Discrimination, Social Cost of Monopoly. **[4L]**
3. **Monopolistic Competition**: Meaning and Characteristics, Price and Output Determination Under Monopolistic Competition, Product Differentiation, Selling Costs, Comparison with Perfect Competition, Excess Capacity Under Monopolistic Competition. **[3L]**
4. **Oligopoly:** Characteristics, Indeterminate Pricing and Output, Cournot Model of Oligopoly, Price Leadership (Only Meaning and Characteristics) Collusive Oligopoly(Meaning and Characteristics Only), Only Kinked Demand Curve Model of Oligopoly. **[4L]**

Module-IV

1. **Factor Pricing:** Marginal Productivity Theory and Demand for Factors (Statement and assumption only). **[3L]**
2. **Concept of Rent:** Ricardian and Modern Theories of Rent; Quasi-Rent. **[2L]**
3. **Concept of Labour:** Wage Rate, Nominal Wage, Real Wage. **[1L]**
4. **Concept of Capital:** Gross Interest, Net Interest, Zero Interest Rate. **[1L]**
5. **Concept of Profit:** Pure Profit, Normal Profit, Abnormal Profit. **[1L]**

Suggested Readings

1. Panchanan Das, Anindita Sengupta-Economics I: Oxford.
2. S.Mukherjee, M. Mukherjee & A. Ghose : Microeconomics, Prentice-Hall.
3. Koutsoyianni : Modern Micro-Economics, Macmillan
4. Vinita Agarwal: Managerial Economics, Pearson
5. Debes Mukherjee: Essentials of Micro and Macro Economics, Central
6. R. G. Hubbard & O'Brien: Microeconomics, Pearson

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB

(Formerly West Bengal University of Technology)

Syllabus for Bachelor in Supply Chain Management

Effective from the Academic Year 2019-20

Semester – 1st **Credit Points– 4**

Paper: Computer Applications **Total Contact Hours - 40**

Paper Code: BBA (N) - 105

Module I:Basic Computer Concepts : Computer and Its Characteristics, Basic Block Diagram of Computer System, First Generation, Second Generation, Third Generation, Fourth Generation, Fifth Generation, Modern Taxonomy of Computers, Mini Computer, Micro Computer, Mainframe Computer, Super Computer, Laptop, Keyboard, Mouse, Light Pen, Barcode Readers, Scanners, MICR, OCR, Voice Recognition and Handwriting Recognition Systems, Visual Display Terminals, Printers, Plotters, Primary Storage – RAM, ROM, EEROM, PROM, EPROM, Secondary Storage – Direct Access Devices, Serial Access Devices: Hard Disks, CD-ROM, DVD, Cache Memory, Virtual Memory(Definition Only), Control Unit, Arithmetic and Logic Unit, Decoders, Registers, Machine Instructions, Stored Program Concept, Program Execution: Fetch-Decode-Execute Cycle, Arithmetic, Logical and Shift Operations. **[8L]**
Module II: Computer Software: Meaning of Software, Broad Classification of Software, System Software, Application Software, Utilities. Operating Systems: Basic Idea of An OS (DOS, Windows, Unix, Linux), Functions of OS, OS As a Resource Manager – Memory Management, Input /Output Management, Secondary Storage Management, Program Management, Network Management, Application Packages. **[6L]**
Module III: Word Processing Software: **Microsoft Word 2007:**The different functionalities in the Microsoft Word Software 2007, Creation of a New Document, Editing an Existing Document, Saving and Printing a File, Use of the Different Ribbon Tab and Tools, Handling Tables in MS Word 2007, Mail Merge, Macro. **[6L]**
Module IV: Spreadsheet Software : Microsoft Excel 2007: Creating a New Spreadsheet Document, Editing an Existing Document, Saving Spreadsheet in Different Formats, Validation of data in Fields, Different Tools Available in MS Excel 2007 Ribbon Tabs, Performing Mathematical Calculations (using Formula and Functions), Searching, Sorting and Filtering, Min Media Mode, Reference Operators, Functions: Typing a Function, Creating a Column Chart: Changing the Size and Position of a Chart Saving a File in Microsoft Excel, Closing a Microsoft Excel Worksheet, Formatting Excel Worksheet for printing. **[10L]**
Module V: Presentation Software: Microsoft PowerPoint 2007: The Different Functionalities of Microsoft PowerPoint 2007, Creating a PowerPoint Presentation, Creating and Inserting a New Slide, Creating a Title Slide; Applying a Design Template. Creating a Hierarchy, Using a Two-Column Text, Slide Sorter View, Running the Slide Show, Printing the Slides, Slide Transition and Custom Animation. **[5L]**
Module VI : DBMS Software :MS Access 2007: Creating New and Opening Existing Databases, Creating a Database, Forms, Query, Reports Using a Wizard , Relationships - How to Link Multiple Tables Together. **[5L]**

Suggested Readings:

1. R.S. Salaria, Computer Fundamentals, Khanna
2. N.S. Gill, Handbook of Computer Fundamentals, Khanna
3. Leon , Introduction to Computers with MS-Office 2007, TMH
4. Step by Step (Microsoft Office System) 2007 Edition, Prentice -Hall of India
5. P.K.Sinha - Computer Fundamentals, BPB Publication.
6. V.Rajaraman -Fundamentals of Computers, PHI, Sixth Edition
7. Amit Goel, Computer Fundamentals, Pearson.