

ARYAVART INTERNATIONAL UNIVERSITY  
Tilthai, Dharmanagar, North Tripura

ARYAVART INTERNATIONAL UNIVERSITY

Tilthai, Dharmanagar, North Tripura-799250

Syllabus for BBA

Semester 1

Theory										
Course Code	Topic	L	T	P	Credit	Theory Marks	Internal Marks	Practical Marks	Total Marks	
24MG101	Principles of Management & Organisational Behaviour	4	0	0	4	70	30	0	100	
24CM101	Accounting and Financial Management	4	0	0	4	70	30	0	100	
24MG104	Business Mathematics and Statistics	4	0	0	4	70	30	0	100	
24MG105	Microeconomics	4	0	0	4	70	30	0	100	
24GN101	Environmental Studies	2	0	0	2	70	30	0	100	
<b>Generic Elective (GE-I) Choose any one</b>										
24MG114	Ethics & Corporate Social Responsibility	2	0	0	2	70	30	0	100	
24MG115	Tax Planning	2	0	0	2	70	30	0	100	
24MG116	Econometrics	2	0	0	2	70	30	0	100	
<b>Total</b>					<b>20</b>	<b>420</b>	<b>180</b>	<b>0</b>	<b>600</b>	



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**Detailed Syllabus**

**PRINCIPLES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR**

**Code: 24MG101**

Max Marks: 70

**UNIT I** **(8 hours)**

Introduction: Meaning, Objectives, Differences between Administration and Management, Levels of Management, Kinds of Managers, Managerial roles, History of Management, Recent trends in Management.

**UNIT II** **(9 hours)**

Planning: Importance, Process, Benefits of Planning, Types of Plans, Planning tools and techniques.

Organising: Meaning, Types of Organisation structures, Traditional structures, Directions in organisation structures.

Leading: Meaning, Nature, Traits and Behaviour, Contingency approaches to Leadership, Transformational leadership.

Controlling: Meaning, Importance, Steps in the control process, Types of Control.

**UNIT III** **(9 hours)**

Organisational Behaviour: Introduction, Meaning, History of Organisational Behaviour, Organisational effectiveness, Organisational learning process, Stakeholders, Contemporary challenges for Organisations.

**UNIT IV** **(9 hours)**

Behavioural Dynamics: MARS Model of individual behaviour and performance, Types of Individual behaviour.

Personality in Organisation, Values in the work place, Types of values, Perception, Meaning, Model of Perceptual process.

Emotions in work place, Types of emotions, Circumplex Model of Emotion, Attitudes and Behaviour, Work-related stress and its management.

Motivation: Meaning, Maslow's Hierarchy of Needs, Four Drive Theory of Motivation.

**UNIT V** **(9 hours)**

Teams: Advantages of Teams, Model of Team Effectiveness, Stages of Team Development.

Power: Meaning, Sources, and Contingencies of Power, Consequences of Power.

**REFERENCE BOOKS:**

1. MGMT, Chuck Williams & Manas Ranjan Tripathy, 5/e, Cengage Learning, 2013.
2. Organizational Behavior, Steven L. McShane & Mary Ann Von Glinow, 6/e, McGraw Hill Education, 2015.
3. Management & Organisational Behaviour, Laurie J. Mullins, 7/e, Prentice Hall, 2005.
4. Essentials of Management, Koontz, McGraw Hill, 8/e, 2014.
5. Management, John R. Schermerhorn, Jr., 8/e, Wiley India, 2010.
6. Organizational Behaviour, Fred Luthans, 12/e, McGraw Hill International, 2011

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**ACCOUNTING AND FINANCIAL MANAGEMENT**

**Code: 24CM101**

Max Marks: 70

**UNIT I**

(15 Hrs)

Introduction – Principles – Concepts & Conventions – Double entry system of accounting – Journal – Ledger. Preparation of trial balance. Subsidiary Books with special reference to simple cash book and three column cash book.

**UNIT II**

(12 Hrs)

Final accounts of sole trader: Adjusting entries, Including reserve for bad debts, Reserve for discount on debtors and creditors, Preparation of final accounts.

**UNIT III**

(08 Hrs)

Introduction – Meaning, Scope, Functions of finance manager. Unit Costing: Preparation of cost sheet.

**UNIT IV**

(12 Hrs)

Ratio analysis: Meaning of ratio – Advantages – disadvantages – types of ratio – usefulness – liquidity ratios – profitability ratios, Efficiency ratios, Solvency ratios. (Theoretical concepts) Funds Flow Statement: Meaning – concepts of funds flow. Cash flow statement : Meaning, Need – Simple problems on cash flow statement.

**UNIT V**

(10 Hrs)

Marginal Costing: Meaning – Definition – Concepts in marginal costing – Marginal equations – P / V ratio – B.E.P – Margin of safety – Sales to earn a desired profit – Problems on above Budgetary control: Meaning – Definition – Preparation of flexible budget and cash budget.

**Text Book:**

1. Financial Accounting, Ashis Bhattacharya, prentice-Hall India Publication.
2. Prasanna Chandra, Financial Management, Tata McGraw Hill Publications

**Reference Books:**

1. “Book Keeping and Accountancy” Choudhari, Chopde.
2. “Cost Accounting”: Choudhari, Chopde.
3. “Financial Management” Text and Problems: M.Y.Khan, P.K. Jain.
4. “Financial Management Theory & Practice” Prasanna Chandra Tata McGraw Hill.
5. Managerial Economics & Financial Analysis, Siddiqui S.A. Siddiqui A.S. New Age.

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**BUSINESS MATHEMATICS AND STATISTICS**

**Code: 24MG104**

Max Marks: 70

**Unit I**

Set Theory; Definition of Set and its presentation. Different types of Sets- Null Sets, Finite & Infinite Sets, Subsets, Universal Set, Power Set etc. Set Operations- Laws of Algebra of Sets, Venn diagram.

**Unit II**

Matrices and Determinants: Definition of a matrix, Types of matrices; Equality, Addition, Subtraction, and Multiplication; Transpose of a matrix; Determinant of a square matrix, Values of determinants up to third order; Properties of Determinants, minors and co-factors, Adjoint of a Matrix, Elementary row and column operations, Inverse of a matrix; Solution of a system of linear equations (having unique solution and involving not more than three variables) using matrix inversion Method and Cramer's Rule.

**Unit III**

Basic Mathematics of Finance Functions and their types– linear, quadratic, polynomial, exponential, logarithmic; Concepts of limit and continuity of a function. Concept of differentiation; Rules of differentiation– simple standard forms. Maxima and Minima of functions (involving first and second order differentiation) relating to cost, revenue and profit. Different types of Interest Rates, concept of Present Value – Present Value and Annuity, Compounding & Discounting, amount of Annuity – Valuation of Simple Loans

**Unit IV**

Basics of Statistics Collection, classification of data, Primary & Secondary data, Tabulation of data, Graphs and charts, Frequency distribution, Diagrammatic presentation of frequency distribution.

**Unit V**

Measure of Central Tendency & Dispersion Measures of Central Tendency including arithmetic mean, geometric mean and harmonic mean: properties and applications; mode and median. Measures of Variation: absolute and relative. Range, quartile deviation and mean deviation; Variance and Standard deviation: calculation and properties.

**Unit VI**

Bi-variate Analysis Simple Linear Correlation Analysis: Meaning, and measurement. Karl Pearson's coefficient and Spearman's rank correlation. Simple Linear Regression Analysis: Regression equations and estimation. Relationship between Correlation and regression coefficients.

**Unit VII**

Time-based Data: Index Numbers and Time-Series Analysis Meaning and uses of index numbers; Construction of index numbers: Aggregative and average of relatives – simple and weighted, Components of time series; additive and multiplicative models; Trend analysis: Finding trend by moving average method and Fitting of linear trend line using principle of least squares.

**Suggested Readings:**

1. Ghosh and Saha, Business Mathematics and Statistics, New Central Book Agency (P) Ltd.
2. M. Raghavchari, Mathematics for Management, Tata McGraw-Hill.
3. S. Baruah, Basic Mathematics and its application in Economics, McMillan.
4. R. S. Bhardwaj, Mathematics for Economics and Business, Excel Books.
5. P. K. Giri and J. Banerjee, Introduction to Business Mathematics, Academic Publishers.
6. R.G.D. Allen, Mathematical Analysis for Economists, McMillan.
7. G. C. Beri, Business Statistics, Tata McGraw-Hill.

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8. J. K. Sharma, Business Statistics, Pearson Education.
9. Nag and Nag, Advanced Business Mathematics and Statistics.
10. D. Sengupta, Application of Calculus, Books & Allied.
11. Dr. Ranjit Dhar, Business Mathematics & Statistics, Dishari.
12. J. Chakrabarti, Business Mathematics and Statistics, Dey Book Concern.
13. Maity and Ghosh, Calculus, Central.
14. Singh J. K., Business Mathematics. Himalaya Publishing House.
15. N.G. Das, Statistical Methods in Commerce, Accountancy and Economics.
16. Hazarika, Padmalochan. A Textbook of Business Mathematics. S. Chand.
17. Trivedi, Business Mathematics, Pearson.



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**MICROECONOMICS**

**Code: 24MG105**

Max Marks: 70

**UNIT I: Introduction to Economics**

Definition, Nature and Scope of Economics. Micro and Macro Economics, Role of Economics in Decision Making.

**UNIT II: Demand Analysis and Supply Analysis**

Meaning of Demand, Types of Demand, Law of demand, Determinants of Demand, Demand Function, Elasticity of demand- price elasticity of demand. Income elasticity of demand, Cross Elasticity of demand, Law of Supply, Supply Schedule, Supply Curve, Price elasticity of supply.

**UNIT III: Production Analysis**

Production function, Types of Production Function, Law of Returns, Law of variable proportions, Law of Increasing Returns, Law of Constant Returns, Law of Diminishing returns, Returns to scale

**UNIT IV: Cost and Revenue Analysis**

Cost concepts, Elements of Cost, Relationship between Production and Cost, Average and Marginal cost curves, Relationship between average and marginal cost, Concept of revenue, Revenue Curve, Relationship between average and marginal revenue

**UNIT V: Market Structures**

Meaning of Market, Classification of markets, Perfect Competition, Imperfect Competition, Monopolistic Market, Oligopoly Market, and Duopoly Market.

**UNIT VI: International Tread**

Balance of Payments, Concepts, Disequilibrium in BOP: Methods of Correction, Tread Barriers and Tread Strategy, Free Trade vs. Protection

**Suggested Readings:**

1. Advanced economic Theory by M L Jhingan, Himalaya Publication, Mumbai
2. A Textbook of Economics Theory, Long Group by H L Ahuja
3. Microeconomics for Management Students by Ravindra H Dholkiya & Ajay N Oza, Oxford University Press
4. Principals of Economics by N G Mankiw, Thomson Press, Sanat Printers, Kundli Haryana
5. Basic Econometrics by Damodar Gujarati

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**ENVIRONMENTAL STUDIES**

**Code: 24GN101**

Max Marks: 70

**UNIT I**

(10 Hrs)

**Introduction to Environmental Studies**

- Multidisciplinary nature of environmental studies; components of environment: atmosphere, hydrosphere, lithosphere, and biosphere.
- Scope and importance; Concept of sustainability and sustainable development.
- Emergence of environmental issues: Climate change, Global warming, Ozone layer depletion, Acid rain etc.
- International agreements and programmer: Earth Summit, UNFCCC, Montreal and Kyoto protocols, Convention on Biological Diversity(CBD), Ramsar convention, The Chemical Weapons Convention (CWC), UNEP, CITES, etc.

**UNIT II**

(10 Hrs)

**Ecosystems and Natural Resources**

- Definition and concept of Ecosystem.
- Structure of ecosystem (biotic and abiotic components); Functions of Ecosystem: Physical (energy flow), Biological (food chains, food web, ecological succession), ecological pyramids and homeostasis.
- Types of Ecosystems: Tundra, Forest, Grassland, Desert, Aquatic (ponds, streams, lakes, rivers, oceans, estuaries); importance and threats with relevant examples from India.
- Ecosystem services (Provisioning, Regulating, Cultural, and Supporting); Ecosystem preservation and conservation strategies; Basics of Ecosystem restoration.
- Energy resources: Renewable and non-renewable energy sources; Use of alternate energy sources; Growing energy needs; Energy contents of coal, petroleum, natural gas and bio gas; Agro-residues as a biomass energy source.

**UNIT III**

(10 Hrs)

**Biodiversity and Conservation**

- Definition of Biodiversity; Levels of biological diversity: genetic, species and ecosystem diversity.
- India as a mega-biodiversity nation; Biogeographic zones of India; Biodiversity hotspots; Endemic and endangered species of India; IUCN Red list criteria and categories.
- Value of biodiversity: Ecological, economic, social, ethical, aesthetic, and informational values of biodiversity with examples.
- Threats to biodiversity: Habitat loss, degradation, and fragmentation; Poaching of wildlife; Man-wildlife conflicts; Biological invasion with emphasis on Indian biodiversity; Current mass extinction crisis.
- Biodiversity conservation strategies: in-situ and ex-situ methods of conservation (National Parks, Wildlife Sanctuaries, and Biosphere reserves.
- Case studies: Contemporary Indian wildlife and biodiversity issues, movements, and projects (e.g., Project Tiger, Project Elephant, Vulture breeding program, Project Great Indian Bustard, Crocodile conservation project, Silent Valley movement, Save Western Ghats movement, etc).

**UNIT IV**

(9 Hrs)

**Environmental Pollution and Control Measures**

- Environmental pollution (Air, water, soil, thermal, and noise): causes, effects, and controls; Primary and secondary air pollutants; Air and water quality standards
- Nuclear hazards and human health risks
- Solid waste management: Control measures for various types of urban, industrial waste, Hazardous waste, E-waste, etc.; Waste segregation and disposal
- Environmental Impact Assessment and Environmental Management System

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**Text Book:**

1. Sanjay Kumar Batra , Kanchan Batra ,Harpreet Kaur; Environmental Studies; Taxmann's, Fifth Edition.
2. M. M. Sulphery; Introduction to Environment Management; PHI Learning, 2019
3. S. P. Mishra, S. N. Pandey; Essential Environmental Studies; Ane Books Pvt. Ltd. ; Sixth Edition.

**Reference Books:**

1. Asthana, D. K. (2006).Text Book of Environmental Studies. S. Chand Publishing.
2. Basu, M., Xavier, S. (2016). Fundamentals of Environmental Studies, Cambridge University Press, India.
3. Bharucha, E. (2013). Textbook of Environmental Studies for Undergraduate Courses. Universities Press.
4. Mahapatra, R., Jeevan, S.S., Das, S. (Eds) (2017). Environment Reader for Universities, Centre for Science and Environment, New Delhi.
5. Masters, G. M., & Ela, W. P. (1991).Introduction to environmental engineering and science. Englewood Cliffs, NJ: Prentice Hall.
6. Odum, E. P., Odum, H. T., & Andrews, J. (1971).Fundamentals of ecology. Philadelphia: Saunders.
7. Sharma, P. D., & Sharma, P. D. (2005).Ecology and environment. Rastogi Publications.





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**ETHICS AND CORPORATE SOCIAL RESPONSIBILITY**

**Code:24MG114**

Max Marks: 70

**Unit I**

Business ethics: Meaning of ethics, why ethical problems occur in business. Ethical principles in business: Utilitarianism: weighing social cost and benefits, Rights and duties, Justice and fairness, ethics of care, Integrating utility, rights, justice and caring, An alternative to moral principles: virtue ethics, Moral issues in business: Worker's and employee's rights and responsibilities, Profit maximization vs. social responsibility.

**Unit II**

Corporate governance: concept, Need to improve corporate governance standards, Features of good governance, Role played by regulators to improve corporate governance, accounting standards and corporate governance, corporate disclosure, insider trading. The Board –Quality, Composition and role of Board, Outside Directors on the board (independent, nominee), Executive and Non-Executive directors, SEBI clause 49, directors and financial institutions in enhancing corporate governance, CEO Duality. Whistle blowing: Needs & Kinds of whistle blowing.

**Unit III**

Ethics and Management: ethics as a normative science, ethics vs religion, factual and moral judgements, Business Ethics as a Management discipline, Managing ethics in workplace, Definition of Ethical Dilemma , Values Driven Management: Indian Ethos for managing Global Change, Values for managing the change, Trans-cultural Human Values in Management.

**Unit IV**

Corporate social responsibility: Meaning, Evolution of corporate social responsibility, common indicators for measuring business social performance, reporting social responsibility measures in annual report, Arguments for and against CSR, Attributes of an effective CSR Programs.

**Suggested Readings:**

1. Prof. Dr Biswajit Satpathy: Indian Ethos And Values, Elite Publications.
2. Manuel G Velasquez: Business ethics- concepts and cases Pearson.
3. Luthans Hodgetts and Thompson: Social issues in business, Macmillan USA.
4. A. C. Fernando: Business Ethics Pearson Education.
5. A. C. Fernando: Corporate Governance Pearson Education.
6. Adrian Davies: Strategic approach to corporate governance Gower Pub Co.
7. N. Gopalswamy: Corporate governance a new paradigm A H Wheeler Publishing Co Ltd.
8. Marianne M Jennings: Cases in Business Ethics Indian South-Western College Publishing.

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**TAX PLANNING**

**Code: 24MG115**

Max Marks: 70

**Unit I**

Income tax concepts: Previous Year, Assessment Year, Person, Assessee, Income (including agricultural income), Residential Status and their incidence of tax, Gross Total Income, Total Income; Income which do not form part of total income, Tax Evasion, Tax Avoidance.

**Unit II**

Computation of Income under the head Salary Computation of Income under the Head: House Property and Profits and gains from Business or Profession. Computation of Income under the Head: Capital gains and Income from other sources.

**Unit III**

Clubbing of Income, Set-off and carry-forward of losses , Deductions from gross total income as applicable to an individual and Business Units; Computation of total income and tax liability of an individual and Business Units, Procedure for assessment: E-filing of return, Introduction to the concept of Goods and Services Tax (GST) and Direct Tax Code (DTC).

**Unit IV**

Meaning of Tax Planning and Management; Nature, scope and justification of corporate tax planning; Computation of taxable income and tax liability of companies: Minimum Alternative Tax, Introduction to tax planning with reference to financial decisions; tax planning with reference to amalgamation or de-merger of companies (only theory).

**Text Books:**

1. Singhanian, V.K. Student Guide to Income Tax. Taxmann Publications Pvt. Ltd. (Latest ed.).
2. Ahuja& Gupta. Simplified Approach to Corporate Tax. Flair Publications Pvt. Ltd (Latest ed.).

**References:**

1. Ahuja& Gupta. Simplified Approach to Income Tax Flair, Publications Pvt. Ltd.
2. Mahesh Chandra & Shukla, D. C. Income Tax Law & Practice Pragati Publications.
3. Goyal, S.P. Tax Planning and Management. Sahitya Bhawan Publications.
4. Singhanian, V.K. .Student Guide to Income Tax. (University ed.). Taxmann Publications Pvt. Ltd.

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**ECONOMETRICS**

**Code: 24MG116**

Max Marks: 70

**Unit I**

Introduction to Econometrics; Basics of Probability; Classical Two Variable Linear Regression Model: Types of Data: Time Series, Cross Section and Panel Data. Concept of Population Regression Function (PRF) and Sample Regression Function (SRF). Estimation of the SRF using Ordinary Least Square (OLS). Analysis of variance and R squared. Understanding the residuals/error term. Assumptions of the model. Expectation and standard errors of the regression coefficients and the error term. Gauss Markov Theorem. Confidence intervals and tests on population regression coefficients, variance of population disturbance term, and forecasts. Testing the significance of the model as a whole. Testing the normality assumption.

**Unit II**

Multiple Regression Model: The three variable case. Derivation of the coefficients. Correlation. Additional assumptions. Adjusted R square. Confidence intervals and testing of the regression coefficients. F and t tests for structural stability, contribution and justification of an explanatory variable.

**Unit III**

Other Functional Forms: Regressions in deviation form and through the origin. The loglog, log-lin, lin-log, reciprocal, log-reciprocal models with application.

Dummy variables & Introduction to panel data: Intercept dummy variables, slope dummy variables, Interactive dummy variables. Dummies for testing the presence of seasonal trends. Use of dummies in fixed and random effects.

**Unit IV**

Relaxing the Assumptions of the Classical Linear Model: Multicollinearity: The problem Detection. Solution. Hetero-scedasticity: The problem Detection. Solution. GLS. Autocorrelation: Problem. Tests for detection. Solutions. Specification Errors: Omission of a variable, Inclusion of irrelevant variable, tests for detecting errors, errors in explanatory and dependent variable.

**Suggested Readings:**

1. Christopher Dougherty (2007). Introductory Econometrics (3rd ed.). Oxford University Press.
2. Gujarati, Damodar and Sangeetha (1995). Basic Econometrics (4th ed.), McGraw Hill.
3. Jack Johnston and John DiNardo, Econometric Methods.
4. Pindyck, Robert S. and Daniel L. Rubinfeld (1997) Econometric Models and Economic Forecasts. (3rd ed.). Singapore: McGraw Hill.
5. Ramanathan, Ramu (2002). Introductory Econometrics with Applications (5th ed.). Thomson South Western.

**Theory Paper**

Total: 100 Marks  
External: 70 Marks  
Internal: 30 Marks

**External: 70 Marks**

10 Question (MCQ): 1 marks each (1x10 = 10)

Answer any 6 out of 8 (Very Short 20-30 Words): 2 marks each (2x6 = 12)

Answer any 6 out of 8 (Short 50-70 Words): 3 marks each (3x6 = 18)

Answer any 3 out of 5 (Long 240-300 Words): 10 marks each (5x3 = 30)

**Internal: 30 Marks**

Two Internal Assessment Examinations will be conducted, each carrying 50 marks. The higher of the two scores will be considered for the final assessment.

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## ARYAVART INTERNATIONAL UNIVERSITY

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### Syllabus for BBA

#### Semester 2

<b>Theory</b>									
Course Code	Topic	L	T	P	Credit	Theory Marks	Internal Marks	Practical Marks	Total Marks
24MG202	Macro Economics	4	0	0	4	70	30	0	100
24MG204	Marketing Management	4	0	0	4	70	30	0	100
24MG207	Production and Operations Management	4	0	0	4	70	30	0	100
24CS101	Fundamentals of IT	4	0	0	4	70	30	0	100
24EN102	Business Communication	4	0	0	4	70	30	0	100
<b>Practical</b>									
24CS191	IT Lab	0	0	2	2	0	30	70	100
					<b>22</b>	<b>350</b>	<b>180</b>	<b>70</b>	<b>600</b>

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**Detailed Syllabus**

**MACRO ECONOMICS**

**Code: 24MG202**  
**Max Marks: 70**

**Course Objective:** The objective of Macroeconomics is to provide an understanding of the overall functioning of an economy by analyzing aggregate indicators like GDP, inflation, unemployment, and monetary and fiscal policies. It aims to equip students with the tools to evaluate economic trends and policy impacts on national and global scales.

**UNIT I (10 Hrs)**

**Introduction to Macroeconomics & National Income:**

**Macroeconomics and its scope:** Meaning, Origin, Growth of Macroeconomics, Microeconomics v/s macroeconomics – Importance and Limitations of Macroeconomics

**Concepts of Macroeconomic Analysis:** Stock and flow, Equilibrium and Disequilibrium, Partial and General Equilibrium Analysis –Static, Comparative Static and Dynamic. Circular Flow of Income and Expenditure for Two-Sector, Three-Sector & Four-Sector Model

**National income concepts and their interrelationships:** National Income Concepts – Parameters of National Income - Nominal and Real GNP – Methods of Measuring National Income

**UNIT II (15 Hrs)**

**Theory of Income and Employment:** Say's Law of Market, Classical Theory of Employment Keynesian Theory of Income and Employment - Principle of Effective Demand - Equilibrium Level of Employment & Output Income Determination in Closed and Open Economy Model – Income Determination with Government Sector – Overview of Four Sector Model – Income Determination in Four-Sector Model

**Theory of Consumption and Money:** Overview of Consumption Theories i.e. Keynesian Theory – Life Cycle Theory of Consumption

Definitions and functions of Money, Sources of Money Supply, Theory of Money Supply, Classical Quantity Theory of Money, Keynesian Theory of Demand for Money

**UNIT III (10 Hrs)**

**Economic Growth & Business Cycle:** Meaning and Factors of Economic Growth – Overview of theories of Economic Growth – Neo-Classical Theory of Growth - Meaning and Phases of Business Cycle – Theories of Business Cycle

**Inflation & Unemployment:** Meaning and Methods of Measuring Inflation – Types of Inflation – Social & Economic Effects of Inflation – Classical and Neo-Classical Theories of Inflation – Modern Theories of Inflation - Meaning, Measurement and Kinds of Unemployment – Philips Curve

**UNIT IV (10 Hrs)**

**Monetary Policy:** Meaning and Scope of Monetary Policy – Instrument of Monetary Policy – Limitations and Effectiveness of Monetary Policy – Key areas of Monetary Policy of India

**Fiscal Policy:** Meaning and Scope of Fiscal Policy – Fiscal Instruments and Target Variables – Fiscal Policy and Macroeconomics Goal – Fiscal Policy of India

**Text Book:**

1. Diwedi D. N. “Macroeconomics: Theory and Policy”, Tata McGraw Hill.

**Reference Books:**

2. Salveter D. and E. A. Diulio. “Principles of Economics”, Tata McGraw Hill.
3. Edward Shapiro, “Macroeconomics”, Oxford University Press.
4. Richard T. Frogmen. “Macroeconomics”. Pearson education.
5. Errol D’Souza. “Macro Economics”. Pearson Education.

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**MARKETING MANAGEMENT**

**Code: 24MG204**

**Max Marks: 70**

**Course Objective:** The objective of Marketing Management is to equip students with the knowledge and skills to develop, implement, and evaluate marketing strategies. It focuses on understanding consumer behavior, market research, product development, branding, pricing, distribution, and promotion to achieve organizational goals and build customer relationships.

**UNIT I**

Marketing management - marketing management process - assessing market opportunities - selecting target consumers - marketing mix - market segmentation - targeting and positioning - E marketing.

**UNIT II**

Buyer Behaviour - influencing factors on Consumer Behaviour - buying decision process - industrial buyer behaviour - theories of buyer behaviour.

**UNIT III**

Product policies - consumer and industrial product decisions - branding - packaging and labeling - new product development and product life cycle strategies.

**UNIT IV**

Pricing - pricing strategies and approaches - Distribution - direct and indirect channel - retailing and wholesaling - channel decision.

**UNIT V**

Promotion - advertising - designing copy - media selection - sales promotion strategies - Marketing research - marketing research process - sales forecasting techniques.

**Reference Books:**

1. Berkoviz Kerin Hontley Rudelivs. "MARKETING", 6th ed New York, Mcgraw Hill, 2002.
2. Gary Armstrong and Philip Kotler. "Marketing - An Introduction". 11th ed, Pearson Education Asia.
3. Philip Kotler. "Marketing Management" (Millennium ed.) New Delhi, Prentice Hall of India (P) Ltd, 2001.
4. Rajan Saxena. "Marketing Management". 2nd edition, New Delhi, Tata Mcgraw Hill Publishing Co Ltd. 2001.
5. V. S. Ramasamy and S. Namakumari. "Marketing Management, Planning, Implementation & Control". New Delhi, Macmillan, 2002.

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**PRODUCTION AND OPERATIONS MANAGEMENT**

**Code: 24MG207**

**Max Marks: 70**

**Course Objective:** The objective of Production and Operations Management is to familiarize students with the processes involved in the efficient production of goods and services. It covers topics like planning, designing, managing, and improving production systems to ensure optimal resource utilization, quality control, and meeting customer demands.

**UNIT I**

**Introduction to Production & Operations Management:** Definition, need, responsibilities, key decisions of OM, goods vs. services. Operations as a key functional area in an organization. Operation Strategies-Definition, relevance, strategy formulation process, order qualifying and order winning attribute Maintenance Management: Need of maintenance management, equipment life cycle (Bathtub curve), measures for maintenance performance (MTBF, MTTR and availability). Lean production: Definition of lean production, lean Demand-Pull logic, waste in operations, elements that address elimination of waste, 2 card Kanban Production Control system.

**UNIT II**

**Forecasting:** Definition, types, qualitative (grass roots, market research and Delphi method) and quantitative approach (simple moving average method, weighted moving average and single exponential smoothing method), forecast error, MAD. Scheduling: Operation scheduling, goals of short term scheduling, job sequencing (FCFS, SPT, EDD, LPT, CR) & Johnson's rule on two machines, Gantt charts.

**UNIT III**

**Process Selection:** Definition, Characteristics that influence the choice of alternative processes (volume and variety), type of processes- job shop, batch, mass and continuous, product-process design Matrix and Services design matrix, technology issues in process design, flexible manufacturing systems (FMS), computer integrated manufacturing (CIM). Layout Decision: Layout planning – Benefits of good layout, importance, different types of layouts (Process, Product, Group technology and Fixed position layout). Assembly line balancing by using LOT rule; Location Decisions & Models: Facility Location – Objective, factors that influence location decision, location evaluation methods- factor rating method. Capacity Planning: Definition, measures of capacity (input and output), types of planning over time horizon. Decision trees analysis

**UNIT IV**

**Aggregate Planning:** Definition, nature, strategies of aggregate planning, methods of aggregate planning (level plan, chase plan, and mixed plan, keeping in mind demand, workforce, and average inventory), Statistical Quality control: Variations in the process (common & assignable causes), Control charts: Variable measures (mean and range chart), Attribute measures (proportion of defects and no. of defects) using control tables. Elementary Queuing Theory: Poisson- Exponential Single Server Model with Infinite Population. (question-based on M/M/1.

**Text Book:**

1. Mahadevan B. "Operations Management Theory & Practice". Pearson Education.
2. Heizer Jay and Render Barry. "Production & Operations Management". Pearson Education.

**Reference Books:**

1. Chase R. B., Aquilano N. J., Jacobs F. R. and Agarwal N. "Production & Operations Management Manufacturing and Services". Tata McGraw Hill.
2. S. P. Gupta. "Statistical methods". Sultan Chand & Sons.
3. Adam, E. E. and Ebert. "Production & Operations Management". Prentice Hall of India, New Delhi
4. S. N. Chary. "Production & operations management". Tata McGraw Hill, New Delhi.
5. Buffa E. S. & Sarin R. K. "Modern Production / Operations Management" (8th edition) John Wiley, 1994.
6. Gaither and Frazier. "Operations Management". Thomson South-Western.
7. "Operations Research". P. K. Gupta, Man Mohan, Kanti Swarup, Sultan Chand.
8. "Operations Research". V. K. Kapoor. Sultan Chand & Sons.

**ARYAVART INTERNATIONAL UNIVERSITY**  
**Tilthai, Dharmanagar, North Tripura**

**FUNDAMENTALS OF IT**

**Code: 24CS101**

Max Marks: 70

**Course Objective:** The objective of Fundamentals of IT is to introduce students to the core concepts of information technology, including hardware, software, networking, and databases. It aims to develop foundational skills in using IT tools and understanding their applications in various business and personal contexts.

**UNIT I**

**(12 Hrs)**

**Fundamentals of Computers:** Definition and Characteristics of Computer System. Computer Generation from First Generation to Fifth Generation. Classifications of Computers: Micro, Mini, Mainframe, and supercomputers.

**Computer Hardware:** Major Components of a digital computer, Block Diagram of a computer, Input-output devices, Description of Computer Input Units, Output Units, CPU.

**Computer Memory:** Memory Hierarchy, Primary Memory – RAM and its types, ROM and its types, Secondary Memory, Cache memory. Secondary Storage Devices - Hard Disk, Compact Disk, DVD, Flash memory.

**UNIT II**

**(12 Hrs)**

**Interaction with Computers:** Computer Software: System software: Assemblers, Compilers, Interpreters, linkers, loaders.

**Application Software:** Introduction to MS Office (MS Word, MS PowerPoint, MS Excel).

**Operating Systems:** Elementary Operating System concepts and different types of Operating Systems.

**DOS:** Booting sequence; Concepts of File and Directory, Types of DOS commands.

**Computer Languages:** Introduction to Low-Level Languages and High-Level Languages.

**UNIT III**

**(12 Hrs)**

**Computer Number System:** Positional and Non-positional number systems, Binary, Decimal, Octal, and Hexadecimal Number Systems and their inter-conversion.

**Binary Arithmetic:** Addition, subtraction, multiplication, and division. Use of complement method to represent negative binary numbers, 1's complement, 2's complement, subtraction using 1's complement and 2's complement. Introduction to Binary Coded Decimal (BCD), ASCII Codes, and EBCDIC codes.

**UNIT IV**

**(10 Hrs)**

**Computer Network & Internet:** Basic elements of a communication system, Data transmission modes, Data Transmission speed, Data transmission media, Digital and Analog Transmission, Network topologies, Network Types (LAN, WAN, and MAN), Basics of the Internet and Intranet.

**Internet:** Terminologies related to Internet: Protocol, Domain name, Internet Connections, IP address, URL, World Wide Web. Introduction to Client-Server Model, Search Engine, Voice over Internet Protocol (VOIP), Repeater, Bridge, Hub, Switch, Router, Gateway, Firewall, Bluetooth technology.

**Advanced Trends in IT Applications:** Brief Introduction to Cloud Computing, Internet of Things, Data Analytics, AI and Machine Learning.

**Text Book:**

1. P. K. Sinha & Priti Sinha, "Computer Fundamentals", BPB Publications, 1992.
2. Anita Goel "Computer Fundamentals", Pearson.

**Reference Books:**

1. B. Ram, "Computer fundamentals Architecture and Organization", New Age Intl.
2. Alex Leon & Mathews Leon, "Introduction to Computers", Vikas Publishing.
3. Norton Peter, "Introduction to Computers", 4th Ed., TMH, 2001.
4. Vikas Gupta, "Comdex Computer Kit", Wiley Dreamtech, Delhi, 2004.

विद्याधनं सर्वधनप्रधानं



**ARYAVART INTERNATIONAL UNIVERSITY**  
**Tilthai, Dharmanagar, North Tripura**

**BUSINESS COMMUNICATION**

**Code: 24EN102**

Max Marks: 70

**Course Objective:** The objective of Business Communication is to develop effective communication skills in a business environment, focusing on clarity, conciseness, and professionalism. It aims to enhance students' ability to write and present business documents, engage in meaningful dialogues, and navigate cross-cultural communication challenges.

**UNIT I**

**(10 Hrs)**

**Concepts and Fundamentals:** Introduction to Technical Communication, Need, and importance of communication, Channel, Distinction between general and technical communication, Nature and features of technical communication, Seven Cs of communication, Types of Technical communication, Style in technical communication, Technical communication skills, Language as a tool of Communication, History of the development of Technical Communication, Computer Aided Technical Communication

**UNIT II**

**(12 Hrs)**

**Oral Communication:** Principles of effective oral communication, Introduction of Self and others, Greetings, Handling Telephone Calls Interviews: Meaning & Purpose, Art of interviewing, Types of Interview, Interview styles, Essential, Techniques of interviewing, Guidelines for Interviewer, Guidelines for interviewee. Meetings: Definition, kind of meetings, agenda, meeting minutes, advantages and disadvantages of meetings/ committees, and planning and organization of meetings. Project Presentations: Advantages & Disadvantages, Executive Summary, Charts, Distribution of time (presentation, questions & answers, summing up), Visual presentation, Guidelines for using visual aids, Electronic media (power-point presentation). The technique of conducting Group Discussion and JAM session.

**UNIT III**

**(12 Hrs)**

**Written Communication:** Overview of Technical Writing: Definition and Nature of Technical Writing, Basic Principles of Technical Writing, Styles in Technical Writing.

Note – Making, Notice, E-mail Writing.

Writing letters: Business letters, persuasive letters, sales letters and complaint letters, office memorandum, and good news and bad news letters.

Report Writing: Definition & importance; categories of reports, Elements of a formal report, style, and formatting in the report.

Special Technical Documents Writing: Project synopsis and report writing, Scientific Article and Research Paper writing, Dissertation writing: Features, Preparation and Elements.

Proposal Writing: Purpose, Types, characteristics, and structure.

Job Application: Types of application, Form & Content of an application, Drafting the application, Preparation of resume.

**UNIT IV**

**(10 Hrs)**

**Soft Skills:** Business Etiquettes – Professional Personality, Workplace Protocols, Cubicle. Non-Verbal Communication: Kinesics and Proxemics, Paralanguage.

Interpersonal Skills.

**Language Skills:** Improving command in English, improving vocabulary, Choice of words, Common problems with verbs, Adjectives, Adverbs, Pronouns, Tenses, Conjunctions, Punctuations, prefixes, Suffixes, Idiomatic use of prepositions. Sentences and paragraph construction, Improved spellings, Common errors, and misappropriation, Building advanced Vocabulary (Synonyms, Antonyms), Introduction to Business English.

**Text Book:**

1. Kavita Tyagi and Padma Misra, “Advanced Technical Communication”, PHI, 2011
2. P. D. Chaturvedi and Mukesh Chaturvedi, “Business Communication – Concepts, Cases and Applications”, Pearson, second edition.
3. Rayudu, “C. S- Communication”, Himalaya Publishing House, 1994.
4. Asha Kaul, “Business Communication”, PHI, second edition.

**Reference Books:**

1. Raymond Murphy, “Essential English Grammar- A self-study reference and practice book for elementary students of English”, Cambridge University Press, second edition.

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2. Manalo, E. & Fermin, V. (2007). "Technical and Report Writing". ECC Graphics. Quezon City.
3. Kavita Tyagi and Padma Misra, "Basic Technical Communication", PHI, 2011.
4. Herta A Murphy, Herbert W Hildebrandt, and Jane P Thomas, "Effective Business Communication", McGraw Hill, seventh edition.

**IT LAB**

**(BASED ON 24CS101) Fundamentals of IT:**  
**Core Practical (Implement a minimum 10 out of 15 practicals)**

1. To explore the System settings - Personalisation, System, Devices, Apps, Network & Internet.
2. To practice basic DOS commands like cd, md, dir, erase, cls, copy, date etc.
3. To explore Windows Explorer functionalities like create, rename, move, delete folders and files etc.
4. To practice the use of basic formatting features - Format Painter, Indentation, Line spacing, background colour, find, replace, and dictate commands.
5. To practice the use of Bullets, numbering, multilevel lists and use of Table Features- Insert table with rows and columns, draw tables, excel spreadsheet and quick tables etc.
6. To practice the use of Insert Features – add picture, Chart, SmartArt, WordArt, Equation, Symbols, Header and Footer, Page Numbering etc., and the use of Design Features – Watermark, Page color, Page Border, Themes implementation etc.
7. To practice the use of Layout Features – Margins, Orientation, Size, Columns, Indent, Spacing etc.
8. To practice the use of the Mail Merge Feature to generate envelopes and Labels.
9. To practice the use of Excel basic formatting features – Wrap Text, Insert and Delete (Cells, Sheet, Row or Column), Format – Cell Height, Cell Width, Hide, Un Hide Cell, Protection, Freeze and Unfreeze panes, Macros etc.
10. To practice the use of Insert Features- Pivot Table, Pivot Chart, Picture, Chart and its formatting and Design and the use of Page Layout Features- Margins, Orientation, Page Break, Background, Height and Width of Cells.
11. To practice the use of Formula Features – user defined function, pre-defined functions – Logical, Date, Time, Maths and the use of Data Manipulation Features – Sort, Filter, Advanced Filters, Whatif analysis.
12. To practice the creation of Blank presentation and Selecting Themes and the use of the basic design features – Adding New Slides, Reuse slides, Slides layout etc.
13. To practice the use of Insert Features – add pictures, screenshots, shapes, WordArt, audio, video, date-time etc. and use of Design Features- Changing the theme of presentation, format background and design ideas.
14. To practice the use of Transition features to be applied on Slides content, setting sound, duration etc. and the use of Animation Features to be applied on presentation of Slide, set animation timings and rehearse etc.
15. To practice the use of Slide Show Features – Custom Slide Show, Rehearse Timing etc.

**Application Based practical (Implement a minimum 5 out of 8 practicals)**

16. Create a Folder by your name in your system, and store all the work done this semester inside that folder.
17. Create your Resume using basic formatting features like: table, bullets, WordArt etc.
18. Design an Invitation to a Birthday Party using mail merge features send the invitation to 10 friends.
19. Write an Article for a Magazine with 3 columns and a hyperlink.
20. Create your own mark-sheet using basic formatting features.
21. Create a list of marks of 10 students create charts and a pivot table.
22. Prepare a Sales summary and use features like sort, filter, etc. to manipulate the data.
23. Create a PowerPoint Presentation on any topic of your choice using animation and transition features.

**Note:**

1. In total 15 practicals to be implemented. 2 additional practicals may be given by the course instructor.
2. This is a suggestive list of programs. However, the instructor may add programs as per the requirement of the course.

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**Theory Paper**

Total: 100 Marks  
External: 70 Marks  
Internal: 30 Marks

**External: 70 Marks**

10 Question (MCQ): 1 mark each (1x10 = 10)

Answer any 6 out of 8 (Very Short 20-30 Words): 2 marks each (2x6 = 12)

Answer any 6 out of 8 (Short 50-70 Words): 3 marks each (3x6 = 18)

Answer any 6 out of 8 (Long 100-120 Words): 5 marks each (5x6 = 30)

**Internal: 30 Marks**

Two Internal Assessment Examinations will be conducted, each carrying 50 marks. The higher of the two scores will be considered for the final assessment.

