BS (4Year) Economics Program

The program will be of eight (8) semester's duration with 132 credit hours. However, a student must take 72 credit hours in economics. Students will be admitted after F.A/F.Sc. in semester-I.

First Year

First Semester

Course No.	Subject	Credit Hours
ECON 101	English-I	3
ECON 102	Fundamentals of Economics	3
ECON 103	Islamic Studies	3
ECON 104	Basic Mathematics	3
	Optional (Non- Economics)	3
Total Credit Hours		15

Second Semester

Course No.	Subject	Credit Hours
ECON 105	English-II	3
ECON 106	Pakistan Studies	3
ECON 107	Principles of Microeconomics	3
ECON 108	Mathematical Applications in Economics-I	3
	Optional (Non- Economics)	3
Total Credit		15

Second Year

Third Semester

Course No.	Subject	Credit Hours
ECON 201	English-III	3
ECON 202	Principles of Macroeconomics	3
ECON 203	Introduction to Computer System	3
ECON 204	Mathematical Applications in Economics-II	3
ECON 205	Statistics For Economics-I	3
Total Credit	Hours	15

Fourth Semester

Course No.	Subject	Credit Hours
ECON 205	Intermediate Microeconomics-I	3
ECON 207	Statistics For Economics-II	3
ECON 208	Project Appraisal and Investment Analysis	3
ECON 209	Agriculture Economics and Food Policy	3
ECON 210	Management and Organization of Pakistan's Economy	3
	Optional Non-Economics	3
Total Credit	Indiana Indian	18

Third Year

Fifth Semester

Course No.	Subject	Credit Hours
ECON 301	Intermediate Microeconomics-II	3
ECON 302	Intermediate Macroeconomics-I	3
ECON 303	Public Sector Economics	3
ECON 304	Development Economics	3
ECON 305	Econometrics-I	3
	Optional Economics	3
Total Credit		18

Sixth Semester

Course No.	Subject	Credit Hours
ECON 306	Intermediate Macroeconomics-II	3
ECON 307	Econometrics-II	3
ECON 308	Monetary Theory and Policy	3
ECON 309	International Trade Theory	3
	Optional Non-Economics	3
	Optional Economics	3
Total Credit Hours		18

Fourth Year

Seventh Semester

Course No.	Subject	Credit Hours
ECON 401	Research Methods for Economics	3
ECON 402	International Finance	3
ECON 403	Islamic Economics	3
ECON 404	Economics of Investment and Finance	3
ECON 405	History of Economic Thoughts	3
	Optional Economics	3
Total Credit		18

Eighth Semester

Course No.	Subject	Credit Hours
ECON 410	Research Project or Internship Report or Seminar in Applied Econ. Or Research Paper	6
ECON 406	Managerial Economics	3
ECON 407	Labor Economics	3
	Optional Economics	3
Total Credit	•	15



Optional Non-Economics

Course No.	Subject	Credit Hours
ECON 109	Principles of Accounting	3
ECON 110	Principles of Business Finance	3
ECON 111	Sociology	3
ECON 112	Education	3
ECON 113	History	3
ECON 114	International Relations	3
ECON 115	Political Science	3
ECON 116	Health & Physical Education	3
ECON 211	Fundamentals of Financial Management	3
ECON 212	Psychology	3
ECON 213	Geography	3
ECON 214	Philosophy	3
ECON 310	Money, Banking and Financial Institutions	3
ECON 311	Values, Ethics in Business	3
ECON 312	Statistics	3
ECON 313	Mathematics	3

Optional Economics

Course No.	Subject	Credit Hours
ECON 314	East Asian Economies	3
ECON 315	Human Resource Development	3
ECON 316	Industrial Economics	3
ECON 317	Economics of Social issues	3
ECON 318	Marketing Economics	3
ECON 319	Health Economics	3
ECON 411	Industrial Organization	3
ECON 412	Environmental Economics	3
ECON 413	Tax Policy and Tax Administration	3
ECON 414	General Equilibrium and Welfare Economics	3
ECON 415	Comparative Economic Systems	3
ECON 416	Applied Economics and Computer Application	3
ECON 417	Major Issues in Pakistan's Economy	3
ECON 418	Rethinking Development	3
ECON 419	Political Economy and Global Order	3
ECON 420	Natural Resource Economics	3

Total Credit Hours for BS Economics = 132 Total Credits in Economics = 72 Total Credits in Related & Non-Economics = 60



ECON 101 English-I

Objectives:

Enhance language skills and develop critical thinking.

Course Contents

Basics of Grammar, Parts of speech and use of articles, Sentence structure, active and passive voice, Practice in unified sentence, Analysis of phrase, clause and sentence structure, Transitive and intransitive verbs, Punctuation and spelling

Comprehension

Answers to questions on a given text

Discussion

General topics and every-day conversation (topics for discussion to be at the discretion of the teacher keeping in view the level of students)

Listening

To be improved by showing documentaries/films carefully selected by subject teachers

Translation skills

Urdu to English

Paragraph writing

Topics to be chosen at the discretion of the teacher

Presentation skills

Introduction

Note: Extensive reading is required for vocabulary building

Recommended books

Grammar

- Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 1. Third edition. Oxford University Press. 1997. ISBN 0 194313492
- Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 2. Third edition. Oxford University Press. 1997. ISBN 0 194313506

Writing

 Writing. Intermediate by Marie-Christine Boutin, Suzanne Brinand and Francoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 0 19 435405 7 Pages 20-27 and 35-41.

Reading/Comprehension

1. Reading. Upper Intermediate. Brain Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 453402 2.



ECON 102 Fundamentals of Economics

The objective of this course is to provide students with a basic introduction to micro and macro economics. It aims to create an intuitive understanding of the central principles of the subject without the application of the more complex tools of economics. The most important purpose of this course is to help students learn the economist's way of thinking.

Introduction

Nature, scope and importance of Economics, Microeconomics vs. Macroeconomics, Scarcity and choice, Opportunity cost, Factors of production, Production possibility frontier.

Demand, Supply and Equilibrium

Concepts of demand and supply, Laws of demand and supply, Market equilibrium, Shifts in demand and supply curves, and market equilibrium.

Elasticity

Concept of elasticity, Price elasticity of demand, Income elasticity of demand, Cross Elasticity of Demand, Price elasticity of supply, Application of elasticity.

Utility Theory

Consumer behavior, Preferences, Utility function, Laws of Increasing and diminishing marginal utility, Law of Equi-marginal utility.

Theory of Firm

Factors of production and their rewards, Total, average, and marginal products, Laws of returns, Cost of production, Total, average, and marginal costs, Total, average, and marginal revenue. Concept of profit maximization/Cost minimization.

Market Structure

Perfect competition & imperfect competition: assumptions and Price/Output determination in short run and long run. Monopoly, Short-Run and Long-Run Equilibrium of Monopoly, Regulation of Monopoly.

National Income

Concepts of national income, GDP & GNP, Real vs. nominal GNP, NNP, NI, PDY, Saving and Personal Consumption.

Macroeconomic Issues

Concept of inflation, unemployment, Balance of payment, Exchange rate and Business cycles. Monetary Policy and Fiscal Policy and their role in the economy.

Core Readings

- 1. Michel Parkin. 2004. Economics, 5th Ed., Addison Wesley.
- 2. Paul A. Samualson and W.D. Nordhaus. 2004. Economics, 18th Ed., McGraw Hills, Inc.
- 3. John Sloman, Economics (Latest edition).
- 4. Lipsey and Crystal, Economics, (Latest edition).

ECON 103 Islamic Studies

BASIC TERMS AND CONCEPTS

Subjective study of the Holy Quran and Hadith, Tawheed (Oneness of Allah). Prophethood. The Day of Judgment.

Ibadaat (Worships)

Salat or Namaz. Zakat. Saum (Fasting). Hajj.

Amar Bil Maroof and Nahi anil Munkir (commands and Prohibition)

Importance of Preaching. How to Preach.

Unity of Ummah

Kasb-i- Halal (lawful Earning).

Fundamental Human Rights.

Right to Property, Right to Protect One's Honnour. Right to Life. Right to Faith. Right to Equality. Right to Economic Security. Right to Merit. Right to Justice.

Rights of Women.

Relation with the Non-Muslims.

Khutba Hujjat -ulk-Wida (Farewell Address)

The Life of the Holy Prophet (P.B.U., H.)

Birth of the Holy Prophet. Life before Prophethood. Prophethood. Preaching and Difficulties. The Hijrah (Migration to Al-Madinah). Brotherhood and Treaty of Al-Madinah. Mesaq-e-Madinah. Ghazwat-i-Nabvi (Holy Wars). Ghazwah-i- Badar. Ghazwah-i-Uhad. Ghazwah-i-Ahzab. (Ghazwah-i-Khandiq), Sulah Hadaibiyah and Bait —e- Ridwan. Ghazwah-i-Khyber. Conquest of Makkah —al-Mukramah. Ghazwah-i- Hunain. Ghazwah-i- Tabook.

Hajjat-ul-Wida.

Death of the Holy Prophet .

Islamic Civilization

Influence of Islamic Civilization on the Subcontinent.

Definition of Civilization. Civilization of the Subcontinent before Islam. Element of Islamic Civilization. Influences of Indian Civilization. Social changes. Moral Influence. Political Consequences. Effect on Family Life.

International Influence of Islamic Civilization.

Islam and Scientific Knowledge. Influence of Human thought. Social and Humanistic Effects. Clash of Contemporary Civilization.

BOOKS RECOMMENDED (Latest Editions)

- 1. Abdul Qayyum Natiq, Sirat-e-Mustaqeem (English)
- 2. Abdul Qayyum Natq, Sirat-e-Mustageem (Urdu)
- 3. Dr. Nasiruddin, Islamiat (Urdu) Ghanzfar Academy Pakistan.
- 4. Dr. M. Khalil, Tadrees-e-Islmiat, Jadeed Educational Services, Lahore.
- 5. AIOU, Islamiat, Jadeed Book Depo, Lahore.

ECON 104 Basic Mathematics

The objectives of this course are to introduce students to the basic principles of mathematics.

Preliminaries

Real-number system, complex numbers, introduction to sets, set operations, functions, types of functions.

Matrices

Introduction to matrices, types, matrix inverse, determinants, system of linear equations, Cramer's rule.

Quadratic Equations

Solution of quadratic equations, qualitative analysis of roots of a quadratic equations, equations reducible to quadratic equations, cube roots of unity, relation between roots and coefficients of quadratic equations.

Binomial Theorem

Introduction to mathematical induction, binomial theorem with rational and irrational indices.

Derivatives

Differentiable functions, differentiation of polynomial, rational and transcendental functions, derivatives.

Integration and Definite Integrals

Techniques of evaluating indefinite integrals, integration by substitution, integration by parts, change of variables in indefinite integrals.

Recommended Books

- 1. Dolciani MP, Wooton W, Beckenback EF, Sharron S, Algebra 2 and Trigonometry, 1978, Houghton & Mifflin,
- 2. Kaufmann JE, College Algebra and Trigonometry, 1987, PWS-Kent Company, Boston
- 3. Stewart J. Calculus (3 edition), 1995, Brooks/Cole (suggested text)
- 4. Swokowski EW, Calculus and Analytic Geometry, 1983, PWS-Kent Company, Boston

ECON 105 English-II

Objectives: Enable the students to meet their real life communication needs.

Course Contents Paragraph writing

Practice in writing a good, unified and coherent paragraph

Essay writing

Introduction

CV and job application

Translation skills

Urdu to English

Study skills

Skimming and scanning, intensive and extensive, and speed reading, summary and précis writing and comprehension

Academic skills

Letter/memo writing, minutes of meetings, use of library and internet

Presentation skills

Personality development (emphasis on content, style and pronunciation)

Note: documentaries to be shown for discussion and review

Recommended books

Grammar

 Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 2. Third edition. Oxford University Press 1986. ISBN 0 19 431350 6.

Writing

- Writing. Intermediate by Marie-Chrisitine Boutin, Suzanne Brinand and Francoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 0 19 435405 7 Pages 45-53 (note taking).
- 2. Writing. Upper-Intermediate by Rob Nolasco. Oxford Supplementary Skills. Fourth Impression 1992. ISBN 0 194354065 (particularly good for writing memos, introduction to presentations, descriptive and argumentative writing).

Reading

- Reading. Advanced. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1991. ISBN 0 19 4534030.
- 2. Reading and Study Skills by John Langan
- 3. Study Skills by Riachard Yorky.

ECON 106 Pakistan Studies

Introduction/Objectives

Develop vision of historical perspective, government, politics, contemporary Pakistan, ideological background of Pakistan.

Study the process of governance, national development, issues arising in the modern age and posing challenges to Pakistan.

Course Outline

Historical Perspective

Ideological rationale with special reference to Sir Syed Ahmed Khan, Allama Muhammad Iqbal and Quaid-i-Azam Muhammad Ali Jinnah.

Factors leading to Muslim separatism

People and Land

Indus Civilization, Muslim advent, Location and geo-physical features.

Government and Politics in Pakistan

Political and constitutional phases:

1947-58, 1958-71, 1971-77, 1977-88, 1988-99, 1999 onward

Contemporary Pakistan

Economic institutions and issues, Society and social structure, Ethnicity, Foreign policy of Pakistan and challenges, Futuristic outlook of Pakistan

Books Recommended

- 1. Burki, Shahid Javed. State & Society in Pakistan, The Macmillan Press Ltd 1980.
- 2. Akbar, S. Zaidi. Issue in Pakistan's Economy. Karachi: Oxford University Press, 2000.
- S.M. Burke and Lawrence Ziring. Pakistan's Foreign policy: An Historical analysis. Karachi: Oxford University Press, 1993.
- 4. Mehmood, Safdar. Pakistan Political Roots & Development. Lahore, 1994.
- 5. Wilcox, Wayne.The Emergence of Banglades., Washington: American Enterprise, Institute of Public Policy Research, 1972.
- 6. Mehmood, Safdar. Pakistan Kayyun Toota, Lahore: Idara-e-Saqafat-e-Islamia, Club Road, nd.
- 7. Amin, Tahir. Ethno National Movement in Pakistan, Islamabad: Institute of Policy Studies, Islamabad.
- 8. Ziring, Lawrence. Enigma of Political Development. Kent England: WmDawson & sons Ltd, 1980.
- 9. Zahid, Ansar. History & Culture of Sindh. Karachi: Royal Book Company, 1980.
- 10. Afzal, M. Rafique. Political Parties in Pakistan, Vol. I, II & III. Islamabad: National Institute of Historical and cultural Research, 1998.
- 11. Sayeed, Khalid Bin. The Political System of Pakistan. Boston: Houghton Mifflin, 1967.
- 12. Aziz, K.K. Party, Politics in Pakistan, Islamabad: National Commission on Historical and Cultural Research, 1976.
- 13. Muhammad Waseem, Pakistan Under Martial Law, Lahore: Vanguard, 1987.
- 14. Haq, Noor ul. Making of Pakistan: The Military Perspective. Islamabad: National Commission on Historical and Cultural Research, 1993.

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ECON 107 Principles of Microeconomics

The objectives of this course are to introduce students to the basic principles of microeconomics theoretically and graphically and develop their ability to apply these principles in understanding real world problems.

Introduction

Nature, scope and importance of Economics, Microeconomics vs. Macroeconomics, Scarcity and choice, Opportunity cost, Factors of production, Production possibility frontier, Economic Theory and its Assumptions

Theory of Consumer Behavior

Preferences; Cardinal and Ordinal Approaches; Consumer Equilibrium; Derivation of Compensated and Uncompensated Demand Curves; Elasticities; Market Demand Curve; Theory of Revealed Preferences; Choices involving Risks; Probabilities and Expected Values; Expected Utility Hypothesis

Theory of Production and Cost

Production Function, Fixed and Variable Inputs; Short-Run and Long-Run; Production with one Variable Input; Graphical Derivation of Total, Average, and Marginal Product; Law of Diminishing Returns; Production with Two Variable Inputs; Production Isoquants; Isocost Lines; Output Maximization and Cost Minimization; Elasticity of Substitution

Theory of Cost

Concepts of Costs; Short-Run Cost Theory; Graphical Derivation of total; Average and Marginal Cost in Short-Run; Long-Run Cost Theory; Economies and Diseconomies of Scale; Modern Theory of Cost

Theory of Firm and Market Organization

Pure and Perfect Competitice Market; Equilibrium of the Firm in Short-Run and Long-Run; Equilibrium of Industry in Long-Run; Derivation of Market Supply Curve; Constant Cost; Increasing Cost and Decreasing Cost Industy

Imperfect (Monopoly) Market; Short-Run and Long-Run Equilibrium of Monopoly; Prices Discrimination; Multi-Plant monopoly; Monopsony; Monopoly and Economic Efficiency; Regulation of Monopoly; Monopolistic Competition; Equilibrium of firm and industry under Monopolistic Output and Excess Oligopoly Theory; Capacity; Ideal Oligopoly/Classical Solution to Oligopoly; Collusive Oligopoly.

Factoring Pricing

Factoring Pricing in Perfectly Competitive Market; Demand for labor in perfectly Competitive Market; Supply of Labor in Perfectly Competitive Market; The Determination of Factor Price in the Perfect Markets

Factor Pricing in Imperfectly Competitive Market; Monopolistic power in the product Market; Monopolistic Power in the Factor Market; Bilateral Monopoly Competitive buyer firm vs. monopoly union.

Core Readings

- 1. Koutsoyiannis, A.; Modern Microeconomics, 2nd Edition, New York, The MacMillan Press Ltd., 1979
- 2. Ferguson, C. E. & J. P. Gould; Microeconomics Theory, 4th Edition, Richard D. Irwin Inc. 1975. Recommended Readings

1. Gould, J. P. & Lazaer; Microeconomics Theory, 6th Edition, Richard D. Irwin Inc. 1975,

- 2. Salvatore D.; Microeconomics Theory and Applications, New York, MacMillan Press Ltd., 1986
- 3. Leftwhich R. H. & R. D. Eckert; The Price System and Resource Allocation, 8th Edition, Assistant Registrar Academics Hinsdale, The Dryden Press, 1982 University of Malakand

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ECON 108 Mathematical Applications in Economics-I

The Nature of Mathematical Economics

Ingredients of mathematical models. Derivations: Equation of a straight line and its forms: Two point, intercept, point slope and slop intercept. Types of functions: constant, polynomial, rational, non-algebraic. Relationships and functions. Indices & their rules. Functions of more than two independent variables. Logarithms & the rules of logarithms.

Equilibrium Analysis in Economics

A linear partial equilibrium market model. The effect of an excise tax in a competitive market. Non linear market model. General Market Equilibrium. Equilibrium in a linear National Income Model.

Linear Models and Matrix Algebra

Theory of matrix multiplication. Laws of matrix operations. Types of matrices: Square, identity, null, idempotent, diagonal, transpose and their properties. Conditions for non singularity of a matrix. Minors and cofactors. Determinant & its properties. Solution of linear equations through Gaussian method, Cramer's rule and Inverse of a matrix method. Properties of inverse of a matrix. Use of matrix approach in market & national income models.

Differentiation

Rules of differentiation. Differentiation of a function of one variable. Sumdifference, product, quotient, chain, power, inverse, logarithmic & exponential functions Combinations of rules. Higher order derivatives. Economic applications of derivative. Concept of maxima & minima, elasticity and point of inflection. Profit & revenue maximization under perfect competition, under monopoly. Maximizing excise tax revenue in monopolistic competitive market, Minimization of cost etc.

Partial & Total Differentiation

Partial differentiation & its rules. Higher order & cross partial derivatives (young's theorem). Total differential & total derivatives. Implicit functions rule of differentiation. Optimizing cubic functions & their economic application.

Economic Applications of Partial & Total Differentiation

Comparative static analysis: a linear Partial equilibrium market model, a linear National Income model. Partial elasticities. Production functions Analysis. Maximization & Minimization of unconstrained functions & their economic applications: Profit maximization by a multi-product firm under perfect Competition & monopoly, Price discrimination, Multi-plant monopoly, input decisions etc.

Core Readings

- Chiang A.C. Fundamental Methods of Mathematical Economics McGraw Hill (3rd Edition) 1984.
- 2. Dowling Edward T. Mathematics for Economics Schaum Series, 1981.
- 3. Weber E. Jean, Mathematical Analysis, Business and Economic Application (latest edition), Harper and Row Publishers, Netherlands.

Recommended Books

- 1. Glass Colin J. An introduction to Mathematical Methods in Economics McGraw Hill.
- 2. Haung David, S., Introduction to the set of Mathematics in Economic Analysis Graphical Approach, Simplex Method, Economic Application of linear Programming N-Y John Wiley and Sons, latest edition.

3. Ilen R.G.D., Mathematical Economics, London, Macmillan English Language Book Society.

ECON 201 English-III

Technical Writing and Presentation Skills

Objectives: Enhance language skills and develop critical thinking

Course Contents
Presentation skills
Essay writing

Descriptive, narrative, discursive, argumentative

Academic writing

How to write a proposal for research paper/term paper

How to write a research paper/term paper (emphasis on style, content, language, form, clarity, consistency)

Technical Report writing Progress report writing

Note: Extensive reading is required for vocabulary building

Recommended books:

Essay Writing and Academic Writing

- Writing. Advanced by Ron White. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 435407 3 (particularly suitable for discursive, descriptive, argumentative and report writing).
- 2. College Writing Skills by John Langan. Mc=Graw-Hill Higher Education. 2004.
- 3. Patterns of College Writing (4 edition) by Laurie G. Kirszner and Stephen R. Mandell. St. Martin's Press.

Presentation Skills

Reading

The Mercury Reader. A Custom Publication. Compiled by norther Illinois University. General Editiors: Janice Neulib; Kathleen Shine Cain; Stephen Ruffus and Maurice Scharton. (A reader which will give students exposure to the best of twentieth century literature, without taxing the taste of engineering students).



ECON 202 Principles of Macroeconomics

This is a course in macroeconomic theory at the introductory level and examines the aggregate aspects of the economy. The primary goal is to enhance the understanding of macroeconomic relationships and issues theoretically and graphically.

Introduction

Definition of macroeconomics, Brief account of the development of macroeconomics after the World War-II, Subject Matter, Importance and Schools of Macroeconomics.

National Income

Definition and concept of national income, Measures of national income, Gross Domestic Product (GDP) and Gross National Product (GNP), GDP at factor cost and at market prices, concept of depreciation and NNP, Personal Income and Disposable Income etc., Different methods of computation of national income: Product, Income and Expenditure approaches, Circular flow of income, Real versus Nominal income, GDP deflator and Consumer Price Index [CPI], Per capita income and standard of living, Concepts of Inflation and Unemployment, Macroeconomic variables and their mutual relationship, real and nominal variables. Study of Pakistan Economic Survey (latest).

Consumption, Saving and Investment

The Keynesian Short-Run Consumption Function, Saving Function and Investment Function, The concept of aggregate spending, Income determination under the Aggregate Supply and Aggregate Demand Approach and the Investment Saving Approach. Government Role in Determining Aggregate Output, Evaluating the Impact of Public Policy.

Value of Money

Quantity Theory of Money, Cash Balance Theory of Money, Measurement of Value of Money, Devaluation of Money.

Inflation

Concept of Inflation, Kinds, Causes, & Remedies.

Balance of Payments

Exchange rate, Balance of Trade, Balance of Payments, Causes of Disequilibrium and Measures.

Macroeconomic Issues

Unemployment, Business cycles, Boom and Depression, Monetary Policy and Fiscal Policy and their role in the economy.

Core Readings

- 1. Michel Parkin. 2004. Economics, 5th Ed., Addison Wesley.
- 2. Paul A. Samualson and W.D. Nordhaus. 2004. Economics, 18th Ed., McGraw Hills, Inc.
- 3. John Sloman, Economics (Latest edition).
- 4. Lipsey and Crystal, Economics, (Latest edition).
- 5. Macroeconomics, Froyan

Assistant Registrar (Academics)

Assistant Registrar (Academics)

Aniversity of Malakand

ECON 203 Introduction to Computer System

Introduction

Introduction to Computer s; Definition of a Computer; Hardware and Software; Classification and Types of Computers; A Typical Computer System Configuration

Introduction to Windows 2000 and Ms-Word

Operating System, Performance Management, Desktop Management, Printer Management, Internet Explorer, E-mail. MS-Word, using Advanced Formatting Features, Sharing data with Word, Word Macros, Composing Models and Mathematical Equations.

Spreadsheet (MS Excel)

Spreadsheet and its Applications, using Advanced Formatting Features, Sharing data with Excel, Excel Macros, Mathematical Equations and operations. Formulas and Functions, Charting Data.

PowerPoint and MS-Access

Database Concepts, File Linkages, Data Retrieval, Data Editing / Updating. Data Transferring.

Recommended Readings

- 1. Gimi, Carter and Annette, Marquis, with Karl Browning, Mastering Microsoft Office XP Premium, Selection B.P.B., Publishers, New Dehli , (2001).
- 2. Robertson, D.F., Computer Applications and Programming, Har Brace Jovanovich Inc. USA (latest edition).
- 3. A Textbook of Computer Studies, Published by NWFP Textbook Board, Peshawar



ECON 204 Mathematical Applications in Economics-II

Partial & Total Differentiation

Partial differentiation & its rules. Higher order & cross partial derivatives (young's theorem). Total differential & total derivatives. Implicit functions rule of differentiation. Optimizing cubic functions & their economic application.

Economic Applications of Partial & Total Differentiation

Comparative static analysis: a linear Partial equilibrium market model, a linear National Income model. Partial elasticities. Production functions Analysis. Maximization & Minimization of unconstrained functions & their economic applications: Profit maximization by a multi-product firm under perfect Competition & monopoly, Price discrimination, Multi-plant monopoly, input decisions etc.

Optimization: Constrained & Extrema

Free and constrained optimization, extrema of a function of two variables: graphical analysis, Lagrange method. Utility maximization & Cost minimization. Homogenous Production function, Cobb Douglas Production function. Jaccobian determinants. CES Production Function. Translog Function.

Linear Programming

Ingredients of linear Programming. Graphical approach, simplex method, economic application of linear programming. Concept of primal & dual. Duality theorems. Solving of Primal via dual. Economic interpretation of a dual.

Integral Calculus

Dynamics and Integration. The Nature of Indefinite Integrals, Basic Rules of Integrations & Rules of Operation. The Substitution Rule and the Rule of Integration by Parts. Definite Integrals. Major Properties of Definite Integral. A Definite Integral as an Area under a Curve. Improper Integrals. Economic Applications of Integrals – Finding Total Functions from Marginal Functions, Investment & Capital Formation, Present Value of Cash Flow. Present Value of a Perpetual Flow, Domar Growth Model.

Core Readings

- 1. Chiang A.C. Fundamental Methods of Mathematical Economics McGraw Hill (3rd Edition) 1984.
- 2. Dowling Edward T. Mathematics for Economics Schaum Series, 1981.
- 3. Weber E. Jean, Mathematical Analysis, Business and Economic Application (latest edition), Harper and Row Publishers, Netherlands.

Recommended Books

- 1. Glass Colin J. An introduction to Mathematical Methods in Economics McGraw Hill.
- 2. Haung David, S., Introduction to the set of Mathematics in Economic Analysis Graphical Approach, Simplex Method, Economic Application of linear Programming N-Y John Wiley and Sons, latest edition.
- 3. Ilen R.G.D., Mathematical Economics, London, Macmillan English Language Book Society.

Assistant Registrar Matakand

ECON 205 Statistics for Economics-I

Introduction

Definition and Meaning of Statistics; Purpose and Limitation of Statistics; Classification and Tabulation; Graphic Representation

Collection of Data and Elementary Sampling Notions

Data and its Types; Data Collection Methods; Sampling and its Types; Law of Statistical Regularity

Measures of Central Tendency

Arithmetic Means; Median; Mode; Geometric Mean; Harmonic Mean; Partition Values; Theory of Different Measures

Measures of Dispersion

Definition and Characteristics of Various Measures; Range; Quartile Deviation or Semi-Inter Quartile Range; Mean Deviation (from Mean and Median); Standard Deviation; Coefficient of Variation

Index Numbers

Definition of Index Numbers; Types of Index Numbers; Steps involved in the Construction of Index Numbers; Various Types of Index Numbers.

Probability

Basic Probability: theory. Definition, Laws of Probability, Conditional Probability. Independent and Dependent events; Application in Business.

Random Variables

Introduction, Discrete and Continuous Random variables. Probability function. Expected values of Random variables.

Probability Theory and Distribution

Concepts used in Probability; Types of Probability; Probability Laws; The Binomial Distribution; Poisson Distribution; Normal Distribution

Simple Curve Fitting

Definition; Fitting of a Straight Line; Fitting of Parabolic Curve; Inconsistent Equations

Recommended Readings

- 1. Win. P. R. & R. H. Johnson; Business Statistics, MacMillan Publishing Co. (Latest Edition)
- 2. Neter J. Wasserman & G. A. Whitmore; Fundamental Statistics for Business and Economics, Fourth Edition, 1973
- 3. Choudhry S. M.; Introduction to Statistical Theory, Part-I, 1992, Ilmi Kitab Khana, Lahore.
- 4. Earl K. Bowen & Martin starr: Basic statistics for Business and Economics

ECON 206 Intermediate Microeconomics-I

This course is intended to extend the students understanding of neo-classical microeconomic theory and to introduce the use of mathematical and graphical models of economic processes.

Introduction

Microeconomics, Comparison with other Branches of Economics, An Overview of Microeconomics Topics, Consumer's Decision, Markets, Economic Models, Production, Cost and Welfare, Cost Minimization, Introduction to Maximization of a functions, Functions of several variables & their optimization.

Theory of Consumer Behaviour and Demand Analysis

Axioms of Rational Choice, The utility function, Arguments of utility Function, Indifference curves and Marginal Rate of substitution (MRS), Indifference curves and Transitivity, Convexity of Indifference curve, An alternative derivation, Marginal utility, MRS, Concepts of Perfect substitutes

Assistant Provistrat (Academics)

and perfect complements. Non-homothetic Preference, Consumer's equilibrium, Income & Substitution effects, Hicksian Framework and Slutsky equation, Revealed Preference and the Substitution effect, Indirect utility function & its derivation.

Market Demand & Elasticity

Market demand curves, Types of demand curves, Short Run and Long Run analysis, Elasticity and relationships among elasticities of demand, Theoretical issues in Market demand analysis, Implication of Elasticities and Problem Solving Approach. Identification of Inferior goods, Giffin goods and normal goods.

Production Functions

The Concept of Production Function, how to Choose Variables, Variation in one input, Isoquant Maps and the rate of technical substitution, Returns to scale, The elasticity of substitution, Some common production functions, Technical progress, Equilibrium of the firm. Cobb Douglas Production function.

Cost of Production

Definition of costs, Cost functions, Changes in input prices, Short Run, Long Run distinction. Input substitutability. Input Cost and Demand for Factors of Production, Derived Demand, Cost Minimization, Decreasing and Increasing Cost Industry and Price Determination.

Profit Maximization and Supply

The nature & behavior of firms, Profit maximization, Marginal Revenue, Short Run supply by a Price taking firm, Profit maximization and input demand, Cost minimization. Relationship between cost and production curves.

Core Readings

- 1. Walter Nicholson, Microeconomic Theory: Basic Principles and Extensions (6th edition).
- 2. Varian Hall R., Intermediate Micro Economics Analysis*, Norton & Company, New York, 1993.

Recommended Books

- 1. Ferguson, C.E & Gould, J.P, Microeconomic Theory. Macmillan, (Latest Edition).
- 2. Henderson, J.M & Quandt, R.E., Microeconomic Theory*, N.Y. Melliwra H A Book Co.
- 3. Koutsoyiannis, A., Modern Microeconomics*, London, Macmillan,
- 4. (Latest Edition).



ECON 207 Statistics for Economics-II

Correlation and Regression

Definition; Types of Correlation; Coefficient of Correlation and Regressions, properties of correlation coefficient, Coefficient of determination, Rank Correlation

Interpolation and Extrapolation

Definitions; Symbolic Operators; Difference Tables; Newton's Methods for Equal and Unequal Intervals; Lagrange's Method for Unequal Interval

Sampling and Sampling distributions

Probability and non probability sampling, Sampling distribution of mean, Differnce between means.

Estimation

Point estimation, interval estimation, criteria for good point estimator, confidence interval for mean and difference of means using Z-test.

Hypothesis testing

Introduction, testing of hypothesis about mean and difference of means usng Z-test.

Student t-distribution

Introduction, inferences about mean and difference of means using t-test.

Chi Square Distribution

Variables and Attributes; Classification Based on Attributes; Consistence and Association; Coefficient of Association; Contingency Table; Coefficient of Contingency; Chi-Square

Analysis of Variance

Introduction, One way analysis of variance, Two way analysis of variance

Recommended Readings

- 1. Walpole R. D.; Introduction to Statistics, Third Edition, Prentice-Hall Press
- 2. Win. P. R. & R. H. Johnson; Business Statistics, MacMillan Publishing Co. (Latest Edition)
- 3. Neter J. Wasserman & G. A. Whitmore; Fundamental Statistics for Business and Economics, Fourth Edition, 1973
- 4. Choudhry S. M.; Introduction to Statistical Theory, Part-I, 1992, Ilmi Kitab Khana, Lahore.
- 5. Earl K. Bowen & Martin starr: Basic statistics for Business and Economics

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ECON 208 Project Appraisals and Investment Analysis

Introduction

Meaning of Project Appraisal, usefulness and significance, Aspect of project appraisal with a special focus on economic versus financial analysis, Contours and Dimensions of a project and its essential ingredients, Project Vs. Plans. Project Cycle.

Identify Project Benefits and Costs

Objectives of Costs and Benefits, The Incremental / Net Benefits and "With" and "Without" Comparisons. Categories of Costs and Benefits.

Pricing Project Costs and Benefits

Prices reflecting values, Market price and financial analysis, Finding market prices and related problems, Change in relative prices and inflation: Shadow Prices and economic analysis, Removal of market price distortions in traded and non-traded goods. Premium on foreign exchange through use of Shadow exchange rate and conversion factor approach.

Comparing Project Costs and Benefits (Measuring of a Project Worth)

Undiscounted measures of project worth, Discounted measures of NPW, IRR, BCR, Net benefit – Investment Ratio, Comparative assessment of discounted measures. Social vs. Economic benefits and selection of projects.

Applying Discounted Measures of Project Worth

Sensitivity analysis, Switching value, Choice among mutually exclusive alternatives, Domestic resource cost of foreign exchange earning / saving.

Cost Effectiveness Analysis

Areas and elements of analysis, Methods of analysis: Constant Effect Method, Constant Cost Method, Measuring of cost effectiveness, Present Worth, Annual Worth, Cross over discount rate, Limitation of analysis.

Financial (Investment) Analysis

Theoretical and empirical examination and saving and investment, Concept of capitalization types of securities, non-banking financial institution. Development financing, Asset Structure, Stock Prices, Money Market, Portfolio Theory and Investment Analysis. Financing the industrial sector; Large scale and small scale, Interest rate. Bond market, Real and financial investment. Financial intermediaries; Speculation and Inter – relationship of financial and real variables in the economy.

Recommended Book

- 1. Hughes, A., & D.J. Storey: "Finance and The Small Firm" (Ed) Routledge, London, (Latest).
- 2. Bruno Solmik, International Investment, Addison Wesley, (Latest).
- 3. Burno Solnik: "International Investments" 3rd Ed. Addison, Wesley publishing Co. (Latest).
- Donald, E., Fischer, Arnold, J., Security Analysis and Portfolio Management. Prentice Hall, Delhi, (Latest).
- 5. Hussain, Ch. M: "Project Appraisal, Monitoring and Evaluation Process with Special Reference to Pakistan" Royal Book Co. Karachi, (Latest).
- 6. United Nations: "Guide to Practical Project Appraisal Social Benefit Cost Analysis in Developing Countries." Oxford & IBH publishing Co. New Delhi. (Latest).
- 7. United Nations: "Manual for Evaluation of Industrial Projects" Oxford & IBH Publishing Co. New Delhi, (Latest).
- 8. Zvi Bodie, Alex Kane, Alan K., Essentials of Investment, McGraw Hill, (Latest).

ECON 209 Agriculture Economics and Food Policy

Introduction and Importance of Agriculture

Agricultural Revolution, Importance of Agriculture, Food Safety, Agriculture vs. Industrial development Debate. Current State of Agricultural Development. Brief Overview of Sources of Growth. Introduction to issues in Agriculture etc.

Structure and Characteristics of Agriculture in LDCs

Traditional Agriculture and Productivity. Access to non-labor resources. The Framing Environment: Natural Hazards and Economic Uncertainties. The Food problem. Farm Size and Productivity. Farm Size in Pakistan and Productivity Commercial Farms. Impact of Agricultural Reforms on Farm Size.

Role of Agriculture in Economic Development

A framework of Analysis. Product Contribution, Market Contribution, Factor's Contribution. Foreign Exchange Contribution. Agriculture vs. Industry Debate of Development.

Theory of Rent and the Concept of 'Surplus'

Introduction. Economic Rent. The Theory of Rent. Rent and Quasi-Rent The Ricardian 'Corn Rent. The Rental Market. Agricultural Surplus. Characteristics of Landownership in Underdeveloped Agriculture and Pakistan. The Theory of Share Tenancy. Some Extensions of the Share Tenancy Model.

Agriculture in Dualistic Development Models

Introduction. The Lewis Model. The Ranis-Fei (FR) Model. The Jorgenson Model. Kelley, Williamson, Cheetham Model. Criticism: Dual Economy Models. Agricultural Adequacy; Mellor's Model.

Resource Use Efficiency and Technical Change in Peasant Agriculture.

Efficiency of Resource Utilization. Technological Change in Agriculture. Generation of new Agricultural Technology. Factor-biased Technological Change and its Distributional Consequences. Agricultural Technical Change and Agricultural Employment: Empirical Evidences. Agricultural Resources and Technical Change in LDCs: with Special Reference to Pakistan.

Population and Food Supplies

The Classical Model. Contra-Malthusian Model. Ecological Disequilibrium. Synthesis of Population and Food Supply Theories. Malnutrition in Developing Countries like Pakistan and Remedial Manners. Choice of Planning Strategy for Agriculture Development, Agricultural Project Planning.

Suggested Readings

- 1. Brown, Lester, The Social Impact of Green Revolution, New York, The Greogie Endownment for International Peace, 1971.
- 2. Capstick Margret. The Economics of Agriculture, London George Allen Unwin Ltd., latest edition.
- 3. Chaudhary M. Aslam, (1989), Agricultural Development and Public Policies, Izhar Sons, Lahore.
- 4. Ghatak S., and Ingersent K., Agriculture and Economic Development, (Latest Edition), Harvester Press.
- 5. Johnston, Bruce, F & Fellir Kily. Agricultural and Structural Transformation, Economic Strategies in late Developing Countries.
- 6. Khan Mahmood-ul-Hassan. The Economics of Green Revolution in Pakistan, New York, Published 1975.
- 7. Karamat, A., Political Economy of Rural Development in Pakistan, Lahore Vanguard Book House, 1981.

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- 8. Shafi M., (1995), Pricing of Farm Produce in Pakistan, Objectives, Practices, and Experiences. Print Associates International, Islamabad.
- 9. Thorbake Erike. The Role of Agriculture in Economic Development, New York, Columbia University Press (1971).
- 10. Upton Marlin, Agricultural Production and Resource Use.
- 11. Colman D. and Young T., Principals of Agricultural Economics, Markets and Prices in Less Developed Countries, (1989), Cambridge University Press.
- 12. Yujiro Hayami and Vernon W. Ruttan, Agricultural Development, John Hopkin University Press, London. (Latest edition).

ECON 210 Management and Organization of Pakistan's Economy

Economic Conditions of Pakistan

Economic condition of the country before 1947; Economic condition after Independence **Industry**

Nationalization; Privatization; Problems of Industrial Sector in the Pakistan and their solutions

Agriculture

Problems of Agriculture Sector and their solution; Land Reforms; Farm mechanization; Imports and Exports of Agricultural Goods

Role of Strategic Sectors

Importance and problems of agriculture, industry, human capital, transport and communications sectors, the role of public policies in solving problem of inflation and unemployment.

Banking Sector in Pakistan

Role of commercial and central banks in resource mobilization, growth of banking sector, nationalization and privatization of banks, role of monetary policy in promoting economic growth, Inflation in Pakistan: causes and remedies, Islamic banking in the Pakistan: issues and prospects.

Fiscal System in Pakistan

Public revenues and expenditure, budget formulation and fiscal policy, management of public debt in Pakistan.

Foreign Trade

Role of foreign trade in economic growth, Export-promotion and Import substitution policies, terms of trade, BOP problems, role of remittances and foreign assistance in Economic Development of Pakistan.

Economic Planning & Infrastructure

Short Long Term Planning in Pakistan; Population Planning; Transport & Communications

Books Recommended

- 1. Kh. Amjad Saeed, (latest), "The Economy of Pakistan". S.A. Salman Publications.
- 2. Vaqar Ahmad & Rashid Amjad, The Management of Pakistan's Economy. Oxford University Press, Karachi.
- 3. Pakistan Economic Surveys, Published by Government of Pakistan. (Latest issues).
- 4. Latest Annual Report of State Bank of Pakistan, and CBR year books.
- 5. Chaudhary M. Aslam, Human Resource Development.
- 6. Zaidi, Akbar, (1999), Issues in Pakistan Economy, Oxford Univ. Press, Karachi.

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ECON 301 Intermediate Microeconomics-II

This course is intended to extend the students understanding of neo-classical microeconomic theory and to introduce the use of mathematical and graphical models of economic processes.

The Theory of Market Behaviour

Perfect competition: The Perfectly competitive market: The assumptions of the Model: Short run equilibrium of the price taker firm: Long run equilibrium of the price taker firm. Equilibrium of the industry: Mathematical Derivation of Equilibrium Prices and Quantity: Difference between Perfect and Pure Competition; Price and Output Decision. Mathematical derivation of Price and Quantity.

Monopoly

Monopoly & its Basics, The negatively sloping demand curve: Short run equilibrium, Long Run Equilibrium: Price discrimination: Bi-lateral Monopoly: Multiplant Monopoly: Comparison with perfect competition: Monopoly and Price Distribution, Monopoly and Price Discrimination. Mathematically Price and Quality Solution.

Monopolistic competitive conditions:

The historical setting of the theory of monopolistic competition, Characteristics of Monopolistically competitive firms. The concepts of industry & group: The basic Chamberlain theory of Monopolistic competition. Comparison with pure competition & monopoly. Mathematical Derivation of Price and Output Decision under Monopoly.

Oligopolistic conditions:

A simple statement of the problem of oligopoly: Models of Non-collusive Oligopoly: Cournot, Bertrand, Chamberlin, Sweezy & Price Leadership Collusive model of oligopoly: cartels & price leadership models. Mathematical Derivation of Price and Quantity Determination. Monoposony and Buying Power; influence on Price.

Pricing of Factors of Production

Short Run Demand for one Variable Input. Input price Elasticity. The Short run Demand Curve. Variable inputs. Market demand Curve for an Input: The Price of fixed Factors: Rents & Quasirents. The Supply Curve of Labor: Wage Determination, Role of Unions.

Core Readings

- 1. Walter Nicholson, Microeconomic Theory: Basic Principles and Extensions (6th edition).
- 2. Varian Hall R., Intermediate Micro Economics Analysis*, Norton & Company, New York, 1993.

Recommended Books

- 1. Ferguson, C.E & Gould, J.P, Microeconomic Theory. Macmillan, (Latest Edition).
- 2. Henderson, J.M & Quandt, R.E., Microeconomic Theory*, N.Y. Melliwra H A Book Co.
- 3. Koutsoyiannis, A., Modern Microeconomics*, London, Macmillan, (Latest Edition).



ECON 302 Intermediate Macroeconomics-I

Introduction and National Income

The Development of Macroeconomics, Actual vs. Potential Output, Analytical Approach to Macroeconomics. Circular Flow of National Income, Measurement of GNP: Expenditure Approach, Product Approach / Income Approach, GNP as measure of welfare. Leakages and Injections: Saving and Investment and their Role. Nominal and Real Variables. Economic Models, Exogenous and Endogenous Variables and their Functional Relationships. Leading and Lagged variables. Measuring Unemployment: Oken's Law. How to build simple Macroeconomic Models, Price Indices; Inflation Indexes, Deflation and Stagflation. Introduction to Keynesian and Classical School of Thoughts.

Economic Fluctuation and Its Sources

The Theory of Real Business Cycles: Interpretation: Labor Market, Technology Shocks. Household Behaviour, the persistence of output Fluctuations. Limitations of the Model. The Challenges: What we know and what we don't know? Long-run and Country's Capacity to Produce. Short-run and influence of Aggregate Demand. Random Walk Model. What Determines Inflation Rate, Unemployment Rate and Output Growth? Can we revise Natural Rate of Output? Should we stabilize the Economy? The cost of Inflation? The problem of Budget Deficit?

Theories of Consumption and Their Implications

Theories of Consumption: Duesenbury Hypothesis, Keynesian Consumption Function. Permanent Income Hypothesis / Life Cycle Hypothesis, Beyond Permanent Income Hypothesis, Kuznet's findings and Reconciliation of Marginal Propensity to Consume and Average Propensity to Consume and Evidences. Mathematical derivation of Consumption Models. The MPS Model, Wealth effect in the Static Model. Implications of Consumption Theories for Policy Formulation and Stabilization Policy. Random Walk Model.

Saving and Investment

Definition and Kinds of Investment; Autonomous and Induced etc. Determinants of investment. Present Value Criteria for Investment. Investment Demand and Output Growth. Tobin's Q-Theory. Lags in Investment Demand. Derivation of IS-curve, Shape of IS-curve. Volatility of Investment. Investment Demand and Fiscal Policy. Shifts in Investment Demand Curve and output determination.

Money Market: The Demand and Supply of Money

Money Demand and its Determinants, Regressive Expectation Model. Portfolio Balance Approach, Empirical Estimation of Income and Interest Elasticities. Supply of Money, Determinants of Money Supply. Measurement of Money Supply and its implications, Instruments of Monetary Policy. Interest Sensitivity of Money Supply. Quantity Theory of Money and its Critical Review. Fischer effect, Money, Prices and Inflation. Derivation of LM Curve and its Slope. LM Curve and Money Market Equilibrium. Interaction of IS-LM and Equilibrium.

Aggregate Demand, Supply and Stabilization Policy

Production Function, Demand for Labor and Capital, Labor Market and its Equilibrium. Demand for Goods and Services: Aggregate Demand and its Components. Equilibrium of Aggregate Demand and Supply: Mathematical Solution and Equilibrium. Saving and Investment Balance. Derivation of Simple Multiplier, Tax Multiplier. Inclusion of Imports and Multiplier. The Sticky Wage Model, Insider-Outsider Models. The Workers - Misperception Model, The Imperfect - Information Model, The Sticky Price Model. Rational Expectation (RE), Adaptive Expectations. Keynesian Models: Liquidity Trap. Effectiveness of Policy and Price Rigidity. Slope of Aggregate Supply and Demand Curves. Grand Aggregate Demand Curve. Interaction of IS-LM and Determination. Classical and Keynesian Models. Shocks to Aggregate Demand and Supply and



Stabilization Policy. Supply Side Economics. Stagflation and Stabilization Policies. Short-run – Long-run Philip Curves. Ineffectiveness of Keynesian Policies.

Core Readings

- 1. Branson, William H., (1979), Macroeconomic Theory and Policy, Harper and Row Publishers, New York / London.
- 2. Branson, William H., and Litvack James M., Macroeconomics, (Latest Edition), Princeton University.
- 3. Abel and Barnanki, Macroeconomics, Latest Edition.

Recommended Books

- 1. Glahe, Fred R., (Latest Edition), Macroeconomics, Theory and Policy, Harcourt Brace Jovanovich Inc.
- 2. Mankiw, Gregory N., (2000) Macroeconomics*, Worth Publishers, New York.
- 3. Peel D. and Minfow P., (2002). Advance Macroeconomics, Edward Elgar, Cheltenham, U.K.
- 4. Romer, David, (2001). Advanced Macroeconomics, McGraw Hills, New York / London.
- 5. Sargent, Thomas J., (1988) Rational Expectations and Inflation*, Harper and Raw Publishers, New York / London.

ECON 303 Public Sector Economics

Introduction and Role of Public Sector

The Economic Functions and Public Goods: Allocation of Resources, Redistribution of Income and Wealth and Stabilization. Pricing Public Goods.

The Theory of Public Goods

Fiscal Principles and Concepts: The Traditional Principle of Tax Neutrality is Expended Principle of Fiscal Neutrality. Exhaustive Vs. Non-Exhaustive Public Expenditures, Income Elasticity of Government Expenditures, Tax Vs. Non-tax Revenues, Microeconomic Vs. Macroeconomic Regulatory Taxes, Tax Base, Tax Rate Relationship; Progressive, Regressive and Proportional Taxes, Marginal Propensity to Tax and Marginal Vs. Average Tax Rates; Income Elasticity of a Tax Integral Fiscal Non-Neutrality. Tax Efforts and Tax Collection Performance in Pakistan.

Public Revenue and Taxes

The Economic Case for the Public Sector to Allocate Resources: Market Imperfections, Decreasing Costs of Production, Public Goods and Externalities. Pricing Decreasing Cost Industry.

The Theory of Public Goods

Public and Private Goods, Pure Public Goods, Should Public Sector be Produced Vs. Private Goods? Semi Public Goods, Merit Goods, Free Rider Problem, Externalities and Public Policy.

Distributional Equity in Taxation

The Ability to pay and Economic benefits (received), Cannons of Taxation, The Optional Income Tax Approach. Optimum Tax and Revenue Collection.

Tax Structure

General Equilibrium Vs. Partial Equilibrium: Tax Incidence Analysis. Determinants of Tax Shifting under Partial Equilibrium Conditions. Impacts of Tax Shifting on Price.

Fiscal Policy: Public Expenditure and Budget

Theories of Public Expenditures, Wagner's Law, Efforts of Public Expenditures. Components of Public Expenditures in Pakistan, Sources and Direction of the Growth of Public Expenditures. Kinds of Budget, Surplus, Deficit and Balanced: Preparation of Budget Cycle in Pakistan, Development and Non-Development Budget and its Patterns. Zero Based Budget, Planning, Programming Budgeting System.

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Fiscal Relations

Fiscal and Economic Aspects of Federalism, Federal – Provincial Fiscal Co-ordination, Collection of Revenue and Provincial Share and its Distribution Criteria. Deficit Financing and its Impacts.

Recommended Books

1. Bernard P. Herber, (1999), Modern Public Finance.

2. Chellieah R.J. (Latest eds.), Fiscal Policy in Less Developed countries.

3. David N. Hyman, (1996), Public Finance, A Contemporary Application of ---. Harcount Brace College Publishers.

4. Govt. of Pakistan, Economic Survey, Yearly Publication, Ministry of Finance, Economic Advisory Wing, Islamabad.

5. Rosen and Harvey S., (1999), Public Finance, McGraw Hill.

Musgrave R.A. and B.P., Musgrave (Latest Eds.), Public Finance in Theory and Practice, McGraw Hill.

7. Stiglitz E., (2000), Economics of The Public Sector, W. W. Norton & Co.

ECON 304 Development Economics

Scope and New Developments

Definitions: Economic Development and Growth, Identification of Development variables. Scope and Significance of Development Economics. Characteristics of LDC's. Measurement of Economic Development and Growth. Per Capita Income approach, Quality of Life Index / HDI etc. Historical overview of world development and emerging major issues pertaining to Less Developed Countries (LDC's). Why the whole world is not developed?

Major Theories of Development

Classical and Neo-classical Theories, Adam Smith and Competitive Capitalism, Vicious Circle of Poverty, Stages of Economic Growth, Balanced and Unbalanced Growth, Big Push Theory. Dependency Theory, Structuralist's View Point. Endogenous Growth Theory: New growth Theory. Income Convergence/Divergence debate. Market Friendly Approach.

Agriculture and Industry

Agriculture vs. Industry: Development Debate. Lewis' Model of surplus Labor. Rains' Fei Model and its critical review. Transforming Agriculture, Underemployment problem. Role of Agriculture: Market for Industrial Output, Provision of Input, food, Complementarities, productivity growth.

Population, Education and Human Capital

Demographic Transition, Human Resources as a source of growth and their contributions. Investment in education and returns. Models of Employment & Unemployment: Time Criterion, Productivity Criterion and New Index etc., and Employment generation Strategies/Techniques.

International Debt, Aid / Assistance

Why international borrowing? Two Gap Model, Aid commitments and disbursement. Sources of borrowing. Debt Cycle Theory/Stages. Debt Burden: Debt Servicing, Debt Laffer Curve, Debt buy back etc., Latin American Debt Crises, ASEAN Crises, Debt Problem of LDC's and South Asia, Debt rescheduling etc.

Poverty and Income Distribution

Definitions and Measurement of Poverty/Poverty Line. Poverty concepts/definitions. Absolute Poverty, Relative Poverty, Income approach, Expenditure approach, Basic needs approach, Poverty of Opportunities Index (POPI) and Calorie-based approach etc. Poverty Indicators. Poverty by socio-economic groups. Sources, impacts and policies to combat poverty. Strategies and tools to combat poverty. Growth and Income Inequality in the world.

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Economic Growth and Environment

Model of Environment and Economic Activity. Market Based Approach and Externalities. Deforestation and Renewable Resources, Measuring environment values. Deforestation and Macroeconomic Environment. Industrialization and its environmental cost, Use of Pesticides and Environmental Impacts. Natural resources degradation. Cost of Pollutions/Environmental degradation. International awareness about environment, production and need for Reforms.

Recommended Books

- 1. Balasubramanyam V. and Lall, S. (Latest eds.), Current Issues in Development Economics. McMillan , London.
- 2. Cypher J. M. and Dietz James L., (2004), The Process of Economic Development, Routledge. Tayl or Francis Group, London/New York.
- 3. Todaro M. P., Economic Development in the third World. Latest Edition, Heinemann, London.

Others

- 1. Chenery H. B. and Srinivasen. Hand Book of Development Economics, vol. I & II, Amsterdam (1988, eds.). North Holland.
- 2. Ghatak Subarta, (2003), Introduction to Development Economics, Routledge, Taylor and Francis Group, London/New York.
- 3. Herrick B. and Kindleberger C., (latest eds.). Economic Development. McMillan, New York.
- 4. Hirshman A. O., (1960). Strategy of Economic Development, Yale University, Press.
- Jones H. G., An Introduction to Modern Theories of Economic Growth, (Latest Edition), McGraw Hills.
- 6. Mahboob-ul-Haq Center for Human Development (MHCHD). Human Development in South Asia, Annual Reports, Islamabad.
- 7. Meier Gerald M., Leading Issues in Economic Development, (Latest Issue), Oxford University Press.
- 8. Thirlwall, A.P., (2003), Growth and Development, With Special Reference to Developing Economies 7th edition, Palgrave Publisher.
- 9. Yotopolous Pan A. and Nugent Jeffery B., Economics of Development, Empirical Investigation (Latest eds.). Harper and Row Publishers, London/New York.

ECON 305 Econometrics-I

Introduction

Definition and scope of econometrics, Econometric models vs. Statistical models. Ingredients of econometric modeling. Specification, estimation, verification or evaluation and forecasting

The Classical Linear Regression Model

The Simple Linear Regression Model (SLRM)

Estimation of SLRM by Ordinary Least Squares (OLS) Interpretation of Estimated Coefficients and their Economic Meanings, Hypothesis testing and Analysis of Variance.

The Multiple Linear Regression Model (MLRM)

Estimation of MLR model by OLS and its assumptions Interpretation of estimated coefficients and their economic meanings, Regression through Origin, Double log estimation and Computation of elasticities, Reciprocal and Semi log forms, standardized coefficients, Using R-square and Adjusted R-square as a measure of 'Goodness of Fit' and some Problems with its use.

Testing the significance of individual coefficients, Testing the significance of the model as a whole, Analysis of Variance.

The General Linear Regression Model (GLRM)

Estimation of GLRM by OLS through Matrix Approach Var-Cov matrix of estimated coefficients.

Multicollinearity

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What is Multicollinearity? Distinction between perfect Multicollinearity and less than perfect Multicollinearity (Multicollinearity problem), Consequences of Multicollinearity problem, methods for detection of Multicollinearity problem. Remedial measures for Multicollinearity problem.

Core Readings

1. Gujrati, D. Basic Econometrics , 3rd Edition, "McGraw Hill, (Latest).

2. Koutsoviannis, A.Theory of Econometrics, McMillan, (Latest).

3. Madnani, G.M.K Introduction to Econometrics Principles and Applications, (Latest Edition)

Recommended Books

1. Intrilligator Econometric Model, Techniques and Applications, N. J. Printice Hall, (Latest).

2. Wonnacot, R.J. Econometrics, John Wiley, New York & Wonnacot, E.

3. Pindyck & Econometric Models & Economic Forecasts, 3rd

4. Griffiths, Judge, The Theory and Practice of Econometrics, John Willey and Sons, Latest edition.

ECON 306 Intermediate Macroeconomics-II

Aggregate Demand, Supply and Stabilization Policy

Production Function, Demand for Labor and Capital, Labor Market and its Equilibrium. Demand for Goods and Services: Aggregate Demand and its Components. Equilibrium of Aggregate Demand and Supply: Mathematical Solution and Equilibrium. Saving and Investment Balance. Derivation of Simple Multiplier, Tax Multiplier. Inclusion of Imports and Multiplier. The Sticky Wage Model, Insider-Outsider Models. The Workers - Misperception Model, The Imperfect - Information Model, The Sticky Price Model. Rational Expectation (RE), Adaptive Expectations. Keynesian Models: Liquidity Trap. Effectiveness of Policy and Price Rigidity. Slope of Aggregate Supply and Demand Curves. Grand Aggregate Demand Curve. Interaction of IS-LM and Determination. Classical and Keynesian Models. Shocks to Aggregate Demand and Supply and Stabilization Policy. Supply Side Economics. Stagflation and Stabilization Policies. Short-run – Long-run Philip Curves. Ineffectiveness of Keynesian Policies.

Open Economy and Macroeconomic Stabilization

Exchange Rates and their Determinants: Mundell - Fleming Model (MFM): Small open Economy with perfect Capital Mobility. IS-LM: Goods and Money Market. Small Open Economy, Floating Exchange Rate and Fiscal Policy. Fixed Exchange Rate and Fiscal Policy. Flexible and Managed Exchange Rates. Monetary Policy, Devaluation and Recovery from great depression. Trade Policy: Mundell-Fleming Model (MFM) with changing Price Level. MFM and large open Economy. Depreciation and its impacts. Income Absorption Approach and exchange Adjustment and Balance of Payment.

Macroeconomic Policy Debate

Policy Actions: Active or Passive, Ignorance, Expectations and the Lucas Critique. Conduct of Policy: Rule vs. Discretion, Distrust of Policy makers and Political Process. Macroeconomics Policy: Rules for Fiscal Policy, making Policy in uncertain World. Seignorage and Inflation: What can Policy Accomplish? Monetarists vs. Activists debate. Phillips Curve: Short run and Long run analysis. The expectation augmented Phillips Curve. Money Inclusion and output. Short Run and Long Run Adjustment. Perfect Foresight and Adjustment.

Core Readings

- Branson, William H., (1979), Macroeconomic Theory and Policy, Harper and Row Publishers, New York / London.
- 2. Branson, William H., and Litvack James M., Macroeconomics, (Latest Edition), Princeton University.
- 3. Abel and Barnanki, Macroeconomics, Latest Edition.

Recommended Books

- Glahe, Fred R., (Latest Edition), Macroeconomics, Theory and Policy, Harcourt Brace Jovanovich Inc.
- 2. Mankiw, Gregory N., (2000) Macroeconomics*, Worth Publishers, New York.
- 3. Peel D. and Minfow P., (2002). Advance Macroeconomics, Edward Elgar, Cheltenham, U.K.
- 4. Romer, David, (2001). Advanced Macroeconomics, McGraw Hills, New York / London.
- 5. Sargent, Thomas J., (1988) Rational Expectations and Inflation*, Harper and Raw Publishers, New York / London.

ECON 307 Econometrics-II

Heteroskedasticity

What is Heteroskedasticity and what are its causes? Consequences of Heteroskedasticity for OLS estimation. Methods for detection of Heteroskedasticity. Remedial measures for Heteroskedasticity.

Autocorrelation

What is Autocorrelation and it's Causes? Consequences of Autocorrelation for OLS estimation. Methods for detection of Autocorrelation, Remedial measures for Autocorrelation.

Simultaneous Equation Models

Simultaneous equation model, Types of simultaneous equation models, Reduced form equations, The identification problem, Checking the identification – in the model by order condition, Checking the identification – in the model by rank condition, Consistent estimation of parameters of simultaneous equation models, reduced form approaches, indirect least square estimation, Two stage least squares estimation. Engle Granger Causality,

Model Specification

Errors in Variables, Time as a Variable, Dummy Variables

Errors in variables. Time as a variable. Dummy variables. Estimation from grouped data. Exogenous lagged variables. Endogenous lagged variables.

Core Readings

- 1. Gujrati, D. Basic Econometrics , 3rd Edition, "McGraw Hill, (Latest).
- 2. Koutsoyiannis, A.Theory of Econometrics, McMillan, (Latest).
- 3. Madnani, G.M.K Introduction to Econometrics Principles and Applications, (Latest Edition)

Recommended Books

- 1. Intrilligator Econometric Model, Techniques and Applications, N. J. Printice Hall, (Latest).
- 2. Wonnacot, R.J. Econometrics, John Wiley, New York & Wonnacot, E.
- 3. Pindyck & Econometric Models & Economic Forecasts, 3rd
- 4. Griffiths, Judge, The Theory and Practice of Econometrics, John Willey and Sons, Latest edition.

ECON 308 Monetary Theory and Policy

Introduction and Development of Monetary Mechanism



Evolution of Money and Payment System, Definition of Money, Function of Money & Measurement of Money, Demand for Money & Supply of Money. Definitions of Money, M1, M2, M3, L etc.

Role of Money in the Economy

Debate on neutrality and non-neutrality of Money. Classical Dichotomy and Keynesian Integration of Nominal and Real Sectors. Role of Money in the IS-LM Framework. Money in Aggregate Demand & Aggregate Supply Analysis. Keynesian Vs. Monetarist views of Equilibrium Output, Employment and Prices.

Demand for Money

Quantity Theory of Money. Transaction Theories of Demand for Money. Portfolio Theories of Demand for Money. Baumol – Tobin Model of Cash Management. Friedman's Restatement of Ouantity Theory of Money.

The Money Supply Process

Monetary Base, Keynesian Liquidity Preference Framework, Friedman's Modern Quantity Theory of Money. Multiple Deposit Creation: Introducing the Money Supply Process. Determinants of the Money Supply: Exogenous and Endogenous. Understanding Movements in the Monetary Base, Money Multiplier. Velocity of Money and its variability. Explaining Depositor and Bank Behaviour: the Complete Money Supply Model. Regressive Expectation Model.

The Conduct of Monetary Policy: Central Bank

Structure and Functions of Central Bank. Independence of Central Bank and its role in Economic Growth. Tool of Central Bank for Money Control. Monetary Base. The Conduct of Monetary Policy: Goals and Targets. Tools of Monetary Policy: Three Major Tools of Monetary Policy. Required Reserve Ratio, Discount Window Loans and Open Market Operation. Advantages and Disadvantages and Impact Analysis of each Policy Tool. Central Bank as a lender of last Resort. Financial Intermediateries. Monetization of Public Debt. Infectiveness of Stabilization Policies. Targeting interest rate and inflation.

Money & Interest Rates

Determinants of interest rates. Kinds of Interest Rates. The Behavior of Interest Rates. Understanding & Measuring the Interest Rates. Real & Nominal Interest Rates, Theories of Interest Rate Determination. The Risk and Term Structure of Interest Rates. The Distinction Between Interest Rates and Returns. Maturity & Volatility of Bond Returns. Portfolio Choice: the Theory of Asset Demand.

Money and Inflation

What is Inflation & Causes of Inflation? Demand – pull Inflation, Cost – push Inflation, Stagflation & Hyperinflation. Inflation as a Monetary Phenomenon. The Philips Curve and Accelerating Inflation.

Core Readings

- 1. Mishkin, Frederic S., (2001), The Economics of Money, Banking and Financial Markets. (Sixth edition). Addison Wesley, New York.2.
- 2. Fredric S. Mishkin, (1995), Financial Markets and Money, Harper & Row Publishers.

Recommended Books

- 1. Laider, David E.W (1996), The Demand for Money: Theories, Evidence and Problems (Fourth edition), Harper & Row, Publishers, New York.
- 2. Miller, R. L. and David VanHose, (2001), Money, Banking & Financial Markets. South Western, Singapore.

3. Vanish K., Monetary Theory, (2000), Vikas Publishing House, Delhi.

- 4. Patinkin Don, Money, Interest and Prices, Harper and Row Publishers, (Latest Edition).
- 5. Bennett T. McCallum, (1989), Monetary Economics, Theory and Policy, McMillan.

ECON 309 International Trade Theory and Policy

Importance and Bases of Trade

Why Study International Economics? The Changing World and Interdependence: Basis of Trade, Gains from Trade. Absolute Advantage, Comparative Advantage, Overview of Comparative Advantage and Pattern of Trade. Offer Curves and Free Trade Equilibrium. Disagreements on Free Trade: Overview of Emergency of International Trade Issues. The Elasticity of Exports Demand and Balance of Payment. Substitution and Income Effects, Impacts of Rise in Exports Demand.

Growth and Trade

International Trade and Shift in Production Function, Immerizing Growth, Output Growth and Terms of Trade (T.O.T) / Deterioration: Uniform Growth at given T.O.T. The Transfer Problem: Marshall Plan and Transfers, Transfer of Resources: Neutral Case.

Technology and Factor Endowment

Ricardian Trade Model, World Production and Gains. Comparative Cost and Trade Pattern. National and World Gains from Trade. International Wage differentials and Productivity. Technical Progress and International Gains. WTO and Gains from Technical Progress: Impacts on Prices. Equilibrium Production and Consumption: Non-traded and Tradable, Costs, Marginal Physical Product and Production Possibilities. Production Possibilities with Diminishing Returns, Increasing Opportunity Cost. Free Trade and Income Distribution, Relative Demand, Supply and Pattern of Trade. Dutch Disease and its application.

Factor Endowment and Heckscher - Ohlin Theory

Output and Factors Rewards in 2*2 Model. Factor Intensity Comparison. Heckscher- Ohlin (H.O) Model, The Role of Demand, Factor's Prices and Commodity Prices, Factor Price Equalization, and Factor Intensity Reversal. Rybescky Theorem and its critical review.

Markets, Cartels and International Trade

Monopoly and Import Competition, Export Opportunities. Product Differentiation and Monopolistic Competition. Dumping / Discrimination and WTO, Competitiveness and Market Share, Gains from Migration. WTO and Factor's Movements and the Commodity Movement. Multinationals Firms and Foreign Direct Investment, Transfer of Capital, Technology, Skill and other Gains, Transfer of Resources and Transfer Problem.

Tariff, Quota, Trade Policies and WTO

Tariff and Small Country: Effects of Tariff, Price and Demand for Imports, Welfare impacts. Impacts of Tariff on Government Revenue, T.O.T Production and Welfare. Impact of Tariff on Domestic and World Welfare. The Optimal Tariff. Tariff and Distribution of Income.

Core Readings

- 1. Chacholiades, Miltiades, International Economics (Latest Edition). McGraw Hill Book Company, New York, London, Latest edition.
- 2. Chacholiades, Miltiades, International Trade Theory and Policy (Latest Edition). McGraw Hill Book Company, New York, London, Latest edition.
- 3. Donomick Sal Vatore B., International Economics (Latest Edition), Prentice Hal, Latest edition.

Recommended Books

1. Caves Richard, E., and Jones Ronald W., World Trade and Payments: An Introduction, Latest Editions. Little, Brown and Company, Boston, Toront. Latest edition.

Assistant Registrar (Academics)

Assistant Registrar (Academics)

Aniversity of Matakand

- Grubel Herbert C., International Economics, (Latest Edition) Richard D. Irwin Inc., Honewood, Illinois.
- 3. Peter Holinder & Thomas A., Pugel. International Economics. Latest edition.
- 4. Sodersten B. and Geoffry Read., (1994). International Economics, MacMillan Press Ltd. Latest edition.
- 5. Krugman and Obstfeld, International Economics: Theory and Policy, Addison Willey (1998).

ECON 401 Research Methods for Economics

Introduction

Importance of Research Methodologies. Research techniques in social sciences and their limitations. Theory and basis of research. Empirical and theoretical research.

Beginning the Research Process

Business research processes, Problem identification and formulation, the research problem development process, methods of calculation of research cost and its worth.

The Hall Marks of Scientific Investigation

Purposive ness, rigor, testability, replicability, precession and confidence, objectivity, generalizability, parsimony

Research Proposal Development and Evaluation

Overview, types of research proposal, research proposal importance for manager and researcher, letter of request, letter of transmittal, title, background, problem statement, objectives, research strategy and method, nature of the final report, budget and schedule, research proposal evaluation

Fundamentals of Research Design

The nature of research design, error reduction through research design, potential sources of error in the research design process, managerial strategies for dealing with error, major types of design, ex-post facto design, experimental design, validity concerns, managerial considerations,

Foundations of Measurement

The nature of measurement, components of measurements, the measurement process, levels of measurement, nominal, ordinal, interval, ratios, evaluation of measurement scales, validity reliability

Primary Data Collection

The nature of primary data collection, personal interviewing, telephone interviewing, mail interviewing, a comparison of collection methods

Secondary Data Collection

Secondary data in business research, use of secondary data, search strategy, literature cited, expert interview, case study

Scaling and Instrument Design

The nature of instrument design, scale development, question phrasing, response formats, fraudulently used scaling techniques, scale sequencing and layout, pre-testing and correcting

Sampling design

Terminologies and definitions, steps in sampling process, sample designs, probability designs, unknown probability designs, sample size calculations, types of sampling

Report Writing

The Questions and analysis of Research Proposal. Organization of Research Paper. How to format and Write country Research Report. Executive summary and abstract of a report. Conclusion and its basis. Evaluation of Research Work. The Research Report, Research Report Format, Writing and editing of research Report.

Recommended Books

1. Birchenhall C. and Grout P., (latest edition), Mathematics for Modern Economics, Herifaq Publishers, New Delhi.

2. Holt, Rinehart and Winston, Holt-Sounders Japan Ltd. Tokyo (Latest edition).

3. Johnson, Glenew Research Methodology for Economists: Philosophy and Practice, McMillan Publishing Co. (Latest edition).

4. Kidder Louise H., Research Methods in Social Relations.

- 5. Lambert, P., (1985) Advanced Mathematics for Economists. Static and Dynamic Optimization, Basil Black Well.
- 6. Neuman W. Lawrence, (1997) Social Research Methods, Qualitative and Quantitative Approaches, Allyn and Bacon; Boston.

7. Sckaran Business Research Methods

- 8. Uma, Sekarn, (1992), Research Methods for Business. A Skill Building Approach, John Willey & Sons, Inc.
- 9. Young Pauline V., (latest edition), Scientific Social Survey and Research, Prentice Hall Inc.

10. Zikmund William, G., (1994), Business Research Methods, The drydem Press.

ECON 402 International Finance

Introduction

Introduction to international finance, International institutions, Funding Mechanism of International Intuitions, Mechanisms and institutions for financing.

Foreign Exchange Market and Exchange Rate Determination

Foreign Exchange Rates (F.E.R): What it represents? Real, Nominal and Effective Rates. Determinants of Foreign Exchange Rate. Efficient F.E.R Market. Dynamic Theory of Interest and Exchange Rate. The Theory of Spot Exchange Rate Determination. Capital Flow and Speculations. Forward Exchange Market, Interest Arbitrage, Interest Parity Theory, Speculators, Hedgers and Traders, Forward Exchange Rate Policy.

Purchasing Power Parity, Exchange Rates and Balance of Payments (B.O.P)

Purchasing Power Parity (PPP): Non-Trade Goods, Balance of Payment Effect. Test of Exchange Rate Instability. Impacts of F.E.R. Rate Instability. B.O.P: Income Absorption Approach to B.O.P. Elasticities of Exports and Imports and Impact on B.O.P. The Marshall- Larner Conditions. Monetary Approach to B.O.P. Monetarist Critique to the Keynesian Closed Economy Model. B.O.P. Effects of Stabilization Policies. Empirical Tests of Monetary Approach to the B.O.P. WTO and B.O.P Support. Adjustment with Short-run capital Flow. Methods dealing with undesired Short-run Capital Flow.

Open Economy: Monetary and Fiscal Policy

Monetary and Fiscal Policies: Internal and External Balance. Monetary and Fiscal Policy with Fixed Exchange Rates. Problems of Small Country: Fixed Exchange Rate, Free Floating Exchange Rate, Managed Exchange Rate and Critical Review of The Fiscal – Monetary Mix Models. Fiscal Policy and Temporary Payment Imbalances. Monetary Policy and Permanent Payments Imbalances, A Random Walk Model of Payment Imbalances. Critical Review of the Modern Theory and Adjustment Mechanism.

International Institution: Trade, Capital and B.O.P.

Introduction of International Institutions, Role and Major Activities of IMF. IMF Credit Facilities. Loan Mechanism, Value of SDRs. The Optimum Quantity of Reserves, Optimum Interest Rate. Euro-Dollar, Dollar Exchange and Impacts. Role of IMF in B.O.P Support and Stabilization.

International Movements of Factors and Welfare: Impacts / Issues

Facts on International Capital Flow: ASEAN Crisis and Role of International Institution and Criticism. Motive for Capital Movement: Return and Risk Diversification. Globalization, Pros and coins of globalization, Impact of globalization on developing countries.

Core Readings

- 1. Imad A. Mosa, International Finance: An Analytical Approach, 1999, Irwin/ McGraw Hills, Australia.
- Maximo V. Eng, Francis A. L. & Laurence J. Maur, Global Finance, Harper Collins College Publishers.
- 3. Donomick Sal Vatore B., International Economics (Latest Edition), Prentice Hal, Latest edition.
- 4. Grubel Herbert C., International Economics, (Latest Edition) Richard D. Irwin Inc., Honewood, Illinois.
- 5. Peter Holinder & Thomas A., Pugel., International Economics. Latest edition

ECON 403 Islamic Economics

The Foundations of the Socio-Economic System of Islam

Fundamental beliefs: Unity of Allah, Prophet-Hood and the Eternal Message of the Holy Quran, Resurrection and the Day of Judgment – the Concept of Accountability.

The Institutional Framework:

Private Ownership and Property Rights, Family System and the Law of Inheritance, The Institution of Zakah and Bait-ul-Mal, The Institution of Interest and its Inconsistency, Role of the State in an Islamic System

Functioning of an Islamic Economic System

Forms of Business Organization, Financial System: Central and commercial banking, Financial instruments, The Fiscal System: Taxation, Zakah & Usher, Revenues and Expenditure, Equity and Efficiency in Islamic Economic System, International Relations: the concept of Ummah, Economic cooperation among Muslim countries, responsibilities towards International pacts.

Economic Development in Islamic Framework

Goals and Strategies, Poverty alleviation and equity in distribution, Balance between moral and material growth.

Comparative Analysis of Economic Systems

Brief comparison with the conventional capitalist system and Socialism.

The Strategy for Islamization of the Economy

A brief account of various initiatives towards Islamization of the economies with special referece to Pakistan, Iran, Sudan and other Muslim countries.

Suggested Readings

 N.B.P. Seminar Proceedings-Economic System of Islam: Paper III, IV, National Bank of Pakistan Karachi (1980)

2. Khurshid Ahmed (Ed) Studies in Islamic Economics: Paper 8, 9, King Abdul Aziz University Jeddah and The Islamic Foundation UK (1980)

Jeddan and The Islamic Foundation OK (1900)

3. Muhammad Arif (Ed)Monetary and Fiscal Economics of Islam: Paper 7, 13, International Centre for Research in Islamic Economics, K.A.U. (1982)

4. Ziauddin et al (Ed) - Money and Banking in Islam: Selected parts King Abdul Aziz University and Institute of Policy Studies Islamabad (1983)

5. Munawar Iqbal (Ed) -Distributive Justice and need Fulfillment in an Islamic Economy: Paper

International Institute of Islamic Economics, IIU (1986)

6. M. Umer Chapra Islam and Economic Development: Selected parts Inter. Inst. of Isl. Thought and Islamic Research Institute Islamabad (1993)

7. Hafiz M. Yasin, Economic System of Islam: (Mimeographed) - (1993).

ECON 404 Economics of Investment and Finance

Introduction

Investment, Types of Investment, The Economic Theory of Choice (An Illustration under Certainty), Multiple Assets and Risk, Investment Return, Risk and Return, The Measurement of Risk

Financial Securities

Money Market Securities, Capital Market Securities, Return Characteristics of Alternative Securities Types. Introduction to Stock Market Index.

Margin, Business Cycle Analysis, Market Participation, Market structure and market efficiency, Types of trading.

Financial Markets and Intermediaries

Financial Markets, Trading Mechanism, Types of Order, Margin, Margin on Long Purchase, Initial Margin Long Purchase, Maintenance Margin Long Purchase, Effects of Margin on Return, Margin Requirements for Short-sale, Margin and Money Supply.

Financial Intermediaries, Role of Financial Intermediaries in Fund Channalization, Types of Financial Intermediaries. Financial Markets, Types of Financial Markets, Characteristics of Financial Markets, Trading Types and Cost in Financial Markets.

PORTFOLIO ANALYSIS

The Characteristics of the Opportunity Set under Risk

Determining the Average Outcome (Return), Measure of Dispersion (Risk), Variance of Combination of Assets, Characteristics of Portfolio in General.

The Measurement of Risk, The Theory of Risk and Return – Mean-variance, International Diversification

MODELS OF EQUILIBRIUM IN THE CAPITAL MARKET

CAPM, Assumption of CAPM, The Capital Asset Pricing Model, Theoretical and Mathematical derivation of CAPM, Estimation of CAPM. French & Fama Three Factors Model, Background of Three Factors Models, The Three Factors Model, Basic Characteristics of Three Factors Model (Construction of Variables and Expected Relationship with the Security Return). Arbitrage Pricing Model.

Financial Crisis

Background of Financial Crisis, Causes, Conclusion.

Stock Exchange

Stock Exchange Terminologies, Working in Pakistan, Settlement of Accounts, Regulatory Environments, Credit Rating, Introduction of Major Stock Markets. Stock Exchange Indexes.

Core Readings

of the soft spike subject to

Modern Portfolio Theory and Investment Analysis, 5th Edition, Edwin J. Elton and Martin J. Gruber, John Wiley & Sons, Printed by Replika Press Pvt. Ltd. India.

2. William F. Sharpe & Gorden J., "Investments" 5th Ed., Prentice Hall, (Latest).

Recommended Books

- 1. Charles P. Jones., Investment Analysis and Management
- 2. Mandel, L. and Thomas J. O'Brian. Investment
- 3. William F. Sharpe Gordon. Investment
- 4. Robert A. Haugen. Modern Investment Theory
- 5. Lawrence J. Gitman. Fundamentals of Investment.

ECON 405 History of Economic Thought

Introduction

Introduction: Importance of Economic History: Approaches to Study the Subject. Overview of Ancient Greek, Roman and Medieval Economic Thought. Overview of Ancient and medieval thoughts, Quensey's influential ideas, Feudalism, Mercantilism, Nature's Circular Flow, Process of modern theories and thoughts. Overview of Islamic thoughts: Ibne- Khuldoon and thereafter. Overview of Silent Features of Muslim School of Thought

Mercantilists and the Physiocrates

The Contributions of Mercantilists and the Physiocrates. A doctrine of economic process, transition to liberalization: Wage theory to natural price, the task of government.

Classical School

The Contributions of Classical School, Adam Smith; Malthus and Ricardo etc., The Labor Theory of Value. Bullin Debate. Ricardo's Monetary Thought. Evolutionists, Ricardo and Reformers of 18th Century. The Theory of Rent. Profit Concepts of Colonization. Economic

Socialism

Socialism before Marx. English Socialists. Anarchism. Karl Marx's Contributions. The Class Struggle. Criticism on Marx. Challenges to Capitalism. German Historical School, Weber's contributions. The Marginalist School, Neo-Classical Economics. Jeons Inference. The concept of Welfare State. Chamberlin and Robinson. Australian School of thought. Veber and Galberith's Contribution.

Keynesian and Post Keynesian School

The Keynesian and Post Keynesian School, The Great Depression: Economic Policies and Capitalist Instability Between the World Wars. The 20th Century Paradigms. The Growth of International Economy. The Rise and fall of Post World War II. The economic history and Lessons.

- The Emergence of Modern Economic Growth, Building Blocks, Industrial Revolution, Structuralist and Dependency School of thought; Sunkel, Amir Samer, Frank and others' contribution. Technological Change and Impacts. The Crisis of the 1970's and International Responses. Failure of Trickle down effects. Rational Expectation Revolution. Basic Needs Approach and welfare. Emergence Famine and Poverty.
- Modern Economic Thought. Comparison of Post Keynesian and Monetarist Thoughts. Supply side economics. Globalization, Liberalization and New Weave of Economic Growth and Welfare. New Growth Theory. Convergence and Divergence Debate. Future of Economics, Quality and International Trade and emergence of markets, New Regionalism, New directions of research. Environment and sustainable growth.

Recommended Readings

- 1. A History of Economic Ideas, (1959), Robert Lekachman, McGraw Hill Company.
- 2. Economic Theory in Retrospect, Blaug, (1978), Cambridge University Press.
- 3. Frank A. G., (1998), Global Economy in the Asian Age, Univ., of California Press

ECON 406 Managerial Economics

Nature, Scope and Overview of Managerial Economics

The Nature and Scope of Managerial Economics. The Managerial decision making process. Theory of the firm. Profit maximization, Cost Minimization. Economic optimization. Economic relations of variables. The Incremental concept in Economic Analysis. Demand, Supply and Equilibrium.

Demand Analysis: Estimation and Forecasting

The Basis for Demand. The Market Demand function. Demand sensitivity analysis: Elasticity, Price Elasticity of Demand with Managerial applications. Income Elasticity of Demand with Managerial applications. Application of Regression Analysis: Demand estimation. Demand forecasting.

Production and Cost Analysis

Production functions. Total, Marginal and Average Product. Revenue and Cost in Production. Production function estimation. Productivity Measurement. Homogenous and Homothetic Production Function. Short run and long run cost curves. Learning curves and application. Cost-valueprofit analysis. Cost estimation.

Decision Making Under Risk and Uncertainty

Introduction. Risk Analysis of Decision Alternatives. Adjustment for Risk in Decision Making. The Expected Value Criterion. The Standard Deviation Criterion. The Coefficient of Variation Criterion. The Certainty Equivalent Criterion. The Maximax Criterion, Maximin Criterion and Minimax regret criterion. The Decision Tree and Joint Probabilities. Optimal decision Strategy. Limit Pricing and Preventing entry.

Pricing Analysis and Decisions

A Review of Market Structures and Basic Pricing Models. Perfect Competition. Monopoly. Monopolistic Competition. Oligopoly. Selected Pricing Models. Marginalist Pricing. Mark up pricing. New Product Pricing. Oligopoly Model. Contestable Markets. Pricing Strategies for Firms and Market Power. Monopolistic Competition. Price Discrimination, Monoposony and Price Product.

Managerial Theories and Models of the Firm

Baumol's Theory of Sales Revenue Maximization. Marris's Model of Managerial Enterprise. Williamson's Model of Managerial Discretion Topics, Behavioral Model by Cyert and March.

Public Sector Production and Pricing of Goods

Public and Private Goods and their pricing mechanism. Decreasing cost Industry and pricing. Externalities and Market Pricing issues. Rent seeking and control. Government Policy and International Trade, tariff and pricing. Import Competitiveness and tax, International pricing Techniques /Strategies.

Capital Budgeting and Investment

Pre-requisites of Capital Budgeting. Investment Criteria and Decisions. Cash flow estimation, Internal Rate of Return, Profitability-Index Criterion and other criterion. Optimal Capital Budget.

Recommended Books:

- 1. Douglas, E. J., Managerial Economics, Prentice Hall, (1990).
- 2. Hirschey, M. Managerial Economics, (10th edition) U.S.A. Thomson South-Western, (2003).
- 3. Hirschey, M. and J.L. Pappas; Fundamentals of Managerial Economics, Dryden Press, (1998).
- 4. Kent P, and P Young., Managerial Economics: Economic Tools for Today's Decision Makers., (4th Edition) Pearson (2003).
- 5. Keat, P., and P., Young, Managerial Economics, MacMillan, (1992).
- 6. Koutsoyiannis, A., Modern Microeconomics, MacMillan, (1979).

- 7. Mansfield E., (1998), Manageral Economics, Theory, Application and Cases. W. W. Nortion &
- 8. Michael R., Baye, (2000), Managerial Economics and Business Strategy, McGraw Hills.
- 9. Pappas, James, Brigham Eugene F and Hirschey Mark., (latest edition), Managerial Economics, Dryden Press, Chicago.
- 10. Salvatore, D. Managerial Economics, McGraw Hill, (2001).
- 11. Thomas, Maurice., Managerial Economics: In a Global Economy (7th Edition) New York: McGraw Hills, (2002).

ECON 407 Labor Economics

Importance of Labor Economics

Introduction: Industrialization and Emergence of Labor Economics. Tools to Analyze Labor Markets and Conditions. Overview of Labor Issues in Developing and Developed World.

Labor Markets Analysis: Demand for Labor

Labor Market Indicators, Demand for Labor, Decision Making and Labor Hiring. Labor Migration: Reasons and Impacts. Demand for Labor by Firms, Short Run and Long Run Demand for Labor, Industry and Market Demand.

Labor Market: Supply of Labor and Wages

Determinants of Labor Supply. Concepts of Human Capital, Human Capital, Productivity and Wages. The Determinants, Labor Force Participation. Supply of Labor and Household Productions. Labor - Skill, Training and Productivity. The Dual Labor Market Theory. Labor Unions and Wages. Supply and Demand for Labor and Wage Determination. Backward bending Supply Curve of Labor.

Wages, Unemployment and Inflation

Determinants of Wages, Market Determination of Wages and Marginal Productivity, High Wages and Involuntary Unemployment. Stagflation and Unemployment, Structural Adjustment and Wages. Major Sources of Unemployment, Wages and Phillip Curve. Wage Rigidity, Labor Unions and Unemployment. Unemployment and Social Protection.

Labor Market Discrimination

Discrimination in Labor Market: Gender, Race and Ethnicity. Efficiency Wage Theories and Coordination Failure.

Labor Market Information System

Labor Market Information System and Efficiency, Labor Statistics and Labor Policy. Human Welfare and Labor Policy, Minimum Wages, Rationale and Impacts.

Theories of Labor Movements

The Marxist, The Wells, Selling and Pearlman's contributions. Trade Unions in Pakistan, Labor Legislation in Pakistan. Impacts of Labor Union. Labor Policies in Pakistan: Critical Evaluation.

Child Labor

Definition and extent of child labor. Child labor; moral aspects. Child labor an international issue: Extent of Child labor in developing countries. Child labor in Pakistan. Policies to combat child labor. Child labor and international trade issue.

Recommended Readings

1. Comith Stephen, (2003), Labour Economics, Routledge Publishers.

2. Bruce, Kaufman; e. Kaufman, Julie L; Hotchkiss, (2002), Economics of Labour Markets Thomson Publisher. Assistan Registrar (Academics)

3. Current Issues in Labour Economics, (1989), Palgrave Mcmillan.

4. Reynolds, Labor Economics and Labor Relations.

Numbersity of Malakand

Orley, Ashenfelter (edt), Layard, P. R. G., (edt), Hand Book of Labour Economics, Elsevier Science Pub. Co. (1986).

Optional Economics

ECON 314 East Asian Economies

The key objectives of this course are divided into four categories. One, to explore the generic characteristics of East Asian economies while recognizing the diversity of historical and institutional settings across these economies. Two, in contrast to the traditional view that regards government and the market as alternative resource allocation mechanisms, to treat government as an integral element of the economic system. Three, to explore a new perspective of East Asian development by trying to understand the role of government in East Asian economic development through interactions among economic theory, development economics, political science and economic history. Four, to draw policy lessons from the East Asian experience for other developing countries.

ECON 315 Human Resource Development

Introduction and Basic Concepts.

Basic Concepts, Meanings and Definitions of HRD by various Economists. Human Capital Formation and HRD. Significance of HRD to wards economic development. Brief Historical background of HRD. Theories of HRD by T.W. Schultz, Kuznets and modern economists. Factors of HRD. Education, Science and Technology as factors of HRD, its role in HRD, Social and Economic rate of return to Education

HRD and Needs.

Food, Health, Nutrition and Clean drinking water as factor of HRD. Its impact on HRD. Training and Skill development a component of HRD, its various forms and role in HRD.

Migration: Needs and Impacts.

Migration, its kinds and causes, impact on HRD, Brain Drain problem in LDC's, its impact on economy, migration of labour force, remittances and its impact on HRD and economic development.

WTO and Labor Migration.

Information, Globalization, WTO and their impact on HRD. Significance of information in HRD.

Manpower Planning & Forecasting Labor

Concept of Manpower planning, its importance, factors and other allied concepts, stages of Manpower planning, forecasting of labour force in LDC's with special reference to Pakistan

Women and Development

Role of Women in HRD, Female Labour force participations rate, Development of women for HRD, Development of HRD factors in women. Earning of women and economic development Policies / Suggestions to develop the women in Pakistan.

LIMS and Labor Issues in Pakistan

Population profiles in Pakistan. Its salient features, its role in economic development and rate of return to education in Pakistan. Measures to improve the education for HRD in Pakistan, Poverty, Unemployment in Pakistan. Labour force market information (LMIS) in Pakistan. Mismatch between the supply and demand of Labour forces in Pakistan and policies for improvement the population for HRD. Analysis of the efforts regarding HRD in Pakistan, its implications and suggestions to improve HRD in Pakistan. A comparative Study of HRD in Pakistan with other LDCS

Assistant Registrar Academics

- Chaudhary M. Aslam and Hameed, A., 1989, Human Development in Pakistan, Feroze Sons, The Mall, Lahore, Pakistan
- 2. UNDP, (Various Issues), Human Development Reports
- 3. Ali, Karamat, 1998, Political Economy of Human Resource Development, Feroz Sons, The Mall, Lahore
- 4. HDC, Various Issues, Human Development in South Asia, Oxford, Islamabad Pakistan.
- 5. Khilji Bashir Ahmad. 2005, 50 years of Human Resource Development in Pakistan, Shaheen Publishers, Faisalabad, Pakistan.
- 6. Kamal A.R, Human Resource Development in Labour Surplus Economies PDR, PIDE, Islamabad.
- 7. Schultz. T.W., 1961 Investment in Human Capital American Economic Review, Vol.51 USA
- 8. PIDE, 1999, Education and Earnings in Pakistan (Research Report No.177, Islamabad, Pakistan)
- 9. Kuznets S., Human Capital and Development Issues.
- 10. Federal Bureau of Statistics, 50 years of Pakistan, Islamabad
- 11. Ministry of Finance, Economic Survey (Various Issues) Islamabad

ECON 316 Industrial Economics

Theory of a firm

What is the firm and why is it organized? A firm as an alternative to a market. Transaction costs theory explaining appearance of firms. Production scale, specialization level and advantages of firms as a means of production. Hierarchical firm structure and its efficiency. Optimal size of a firm (of a number of hierarchical levels). Hierarchical firm structure under oligopoly.

Consumer Surplus and Public Welfare

Estimation of public welfare within the framework of partial equilibrium analysis. Quasilinear utility function and measure of public welfare. Compensated and equivalent variations. Public welfare and Hicksian and Marshallian demand functions. Consumer surplus as an approximate measure of public welfare.

Economic Theory of Bundling

Bundling as a marketing tactics. Price discrimination and bundling. Heterogeneous consumers. Pure components strategy, pure bundling strategy, and mixed bundling strategy. Superiority of mixed bundling relative to pure bundling. Conditions for mixed bundling strategy to be dominant over pure components strategy. Independent distribution of reservation prices. Homogeneous consumers. Commodity bundling and consumer surplus.

Mergers and Acquisitions

Horizontal Mergers and Acquisitions

Types of mergers and acquisitions: horizontal, vertical, conglomerates. Examples of mergers and acquisitions within the last decade. Mergers of firms with identical production costs. Condition of a merger profitability. Mergers of firms with differing production costs. Reaction of a firm to a change in output by all other firms on the same market. Condition of industry output increase, resulting from a merger. Horizontal mergers and public welfare. Herfindal-Hirshman index as a measure of public welfare. Condition under which horizontal merger results in higher public welfare.

Vertical Mergers

Effect of a vertical merger on output of final and intermediate products. Vertical mergers and market foreclosure. Vertical mergers and profits of integrated and unintegrated firms.

Imperfect Competition and Macroeconomics

Assistant Registrar (Academics)

Theories of business cycles. Increasing returns to scale and stability of economic equilibrium. Price rigidity as a source of business cycles. Explanations of price rigidities: kinked demand curve, menu costs. Market monopolization and price rigidity. Small menu costs and large business cycles during economic booms and busts. Externalities, corrective taxes, and market structure. Possibility of a negative effect of Pigou tax on public welfare under monopoly.

Theory of Regulation

Public costs of monopoly. Subadditivity of cost function - a necessary and sufficient condition for a natural monopoly. Economy of scale, concavity of a cost function and subadditivity. Stability of a natural monopoly.

Recommended Books

Adams W.J., and J.L. Yellen, 1976, "Commodity Bundling and the Burden of Monopoly", Quarterly Journal of Economics, vol. XC, 475-498.

Averch H., and L.L. Johnson, 1962, Behavior of the Firm under Regulatory Constraint, American Economic Review, vol. 52, 1052-1069.

- Baron D., 1989, Design of Regulatory Mechanisms and Institutions, in R. Schmalensee and R.D. Willig eds.: The Handbook of Industrial Organization, Elsevier North-Holland.
- Baumol W.J., J.C. Panzar, and R.D. Willig, 1982, Contestable Markets and the Theory of Industry Structure, New York: Harcourt Brace Jovanovich.
- Becker G., 1991, A Note on Restaurant Pricing and Other Examples of Social Influences on Price, Journal of Political Economy, vol. 99, 1109-1116.
- Braeutigam R., 1989, Optimal Policies for Natural Monopolies, in R. Schmalensee and R.D. Willig eds.: The Handbook of Industrial Organization, Elsevier North-Holland.
- Buchanan J.M., 1969, External Diseconomies, Corrective Taxes, and Market Structure, American Economic Review, vol. 59, 174-177.
- Coase R.H., 1992, The Institutional Structure of Production, American Economic Review, vol. 82, 713-719. Diversity, American Economic Review, vol. 67, 297-308.
- Dixit A.K., and J. Stiglitz, 1977, Monopolistic Competition and Optimum Product
- 10. Farrel J., and C. Shapiro, 1990, Horizontal Mergers: An Equilibrium Analysis, American Economic Review, vol. 80, 107-126.
- 11. Scherer, F. M.; Industrial Market Structure and Economic Performance, McGraw Hill Publications 1990.
- 12. Koch, James V.; Industrial Organizations and Prices, Prentice Hall New Jersey.
- 13. Shepherd, William G.; The Economics of Industrial Organization, Wiley Publications

ECON 317 Economics of Social issues

The role of Economic reasoning in alleviating human misery

World poverty & Economics, Causes of Poverty & requisites of economic growth, Can Govt. help?

Economic systems, Resource allocation & Social well-being

Economic systems, Resource Allocation in a market economy, Resource Allocation in a command economy, The Soviet Model, Social well-being: Market vs. Command

Government control of prices in mixed systems

Price ceiling & floors, Minimum Wages

Pollution problems

What is pollution?, Markets, Resource allocation & Social well-being, Economics of Pollution, What can be done about pollution? Registrar Academics

Economics of crime & its prevention

University

What is crime?, The cost of crimes, Individually & collectively consumed goods, The Economics crime prevention activities

Poverty problems & Discrimination

Poverty in terms of absolute income levels, Poverty in terms of income distribution, Economic causes of poverty, The evidence for discrimination in our Economy, Govt. attempts to alleviate poverty, Using tax policy to fight poverty, What can be done about Discrimination?

Unemployment issues

Costs of unemployment, Analysis of Unemployment problem, What causes people to lose their jobs?, Combating unemployment

Social security & Medicare

Social insurance, Social Security, The economic effects of social security, The future of Social security, Medicare, The Medicare program, The economic effects of Medicare

Reference:

1. Economics of Social issues by Ansel M Sharp et al

- 2. Framing the social security debate, values, politics & Economics by Arnold, Douglas R Michael, 1 Graetz
- 3. Social Security in 21st Century by Kingson, Eric, & James Schultlz

ECON 318 Marketing Economics

Introduction to Marketing

Key Marketing Concepts, Scope of Marketing, Evolution of Marketing, Importance of Marketing, Marketing as an Exchange Process, Marketing as a Demand Management Tool. Marketing Cost and Price Relationship.

Supply Chain / Value Chain Management

Primary and Secondary activities in Supply Chain / Value Chain. Identify and Maximizing linkages within the Various Activities

Strategic Marketing Planning Process

The SMP Process. The BCG Matrix, GE Nine Cell Model and Porter's Generic Strategies Models of SMP.

International Marketing: The Target Markets & Marketing Mix

Identify Target Markets. Forecasting Market Demand, The Target Market Strategies, Key Elements of Marketing Mix, Local Vs. International Marketing, International Marketing Strategy and Planning, Organizational Structure of International Markets, Exporting, Contracting, International Corporations and their Marketing Techniques. The Promotional Program, the Key Components of Promotional Mix.

Product Management

The Consumer and Industrial Products. Product Planning and Development, Product Adoption and Diffusion, Product Life Cycle, Product Positioning and Differentiation, Product Mix Strategies.

Marketing Cost, Finance and Cost Management

Analysis of Cost, Marketing Cost for Products, Reasons for Higher Cost and Methods to Minimize. Abuses and Advantages of Marketing Cost Debate over Legitimacy Solution, Need for Marketing Finance. Kinds of Marketing. Financing. Significance of Prices, Methods of Price Determination. Key Pricing Strategies. Price wars.

Distribution Management and Market Intermediaries

Designing Distribution Networks. Channels Conflict and Channel Power. Physical Distribution. The Wholesale Market, Retail Marketing.

Consumer's and Buyer's Behaviors

Consumer Motive to Marketing, Models of Consumer, Buyer Behaviour, Influences on Buyer's Behaviour, Industrial Buyer Behaviour. Decision making behavior.

Managing Marketing in Various Forms of Competition

Industrial Analysis, Industry and Market Concepts of Competition, Strategies of Leaders, Challengers, Followers and Nichers. Global Marketing, Industrial Marketing, Services Marketing, Agricultural Marketing.

Managing Total Marketing Effort

Key Organizations for Marketing, Market Control, Marketing Audit.

Segmentation and Targeting

Significance, Advantages of Market Segmentation, Segmentation Variables, Segmenting Industrial Markets, Effectives of Segmentation, Market Targeting, Strategic Opinion.

Pricing Strategies and Sales

Theories of Pricing and Value. Supply and Demand Model, Mark-up Pricing, Dumping, Economic Choice, Pricing and Market Orientation, Market Share, Cost based Pricing, Customer based Pricing Methods, Competitor based Pricing war.

Short-run and Long-run Pricing, Predicting Future Conditions Forecasting Sales and difference Pricing Policies, Data Analysis and Sales Forecasting, Survey and Price Analysis, Profit and other Motives for Pricing.

Recommended Readings

1. "Basic Marketing" 8th Edition by Jerome McCarthy, Prentice Hall.

- 2. "Marketing Management: Strategic Approach with a Global Orientation" 3rd Edition by Boyd H.W., latest edition.
- 3. "Marketing" 4th Edition by Evans Burman, McMillan Publishing Co., latest edition.

4. "Principles of Marketing" by R.D. Tousley, Eugene Clark, latest edition.

- 5. "The Fundamentals of Marketing" 11th Edition by Etzel, Walker & Stanton, McGraw Hill (or latest edition).
- 6. "The Marketing Management" Millennium Edition by Philip Kotler, Prentice Hall, latest edition.

ECON 319 Health Economics

Introduction
Health and Medicare: An Economic Perspective
Cost and Benefit analysis
Health care systems and institutions
The Demand for medical services
The Demand for Medical insurance
Medicare production and costs
Structure, Conduct, Performance and market analysis
The role of the Government.



1. Santerre E. "Health Economics" 3rd Edition, Thomson

ECON 411 Industrial Organization

Purpose of this course is to utilize economic models to investigate and understand how industry structure and conduct of firms influence economic performance in markets. After studying the traditional approaches like competition, monopoly and cost theory, newer oligopoly, and game theoretic models are also introduced. Relevant topics include: oligopoly theory, entry barriers, merger activity, product differentiation, and innovation.

ECON 412 Environmental Economics

What is Environmental Economics?

Environmental problems and policy solutions

Social Choice: How much Environmental protection

Efficiency and markets

Market failure: Public bads and externalities

Property Rights
Pigovian tax
Regulating Pollution
Emission fees and marketable permits

Regulations with unknown control costs
Economy-wide effects of environmental regulations

Recommended Readings

- 1. Charles D. Kolstad, Environmental Economics, Oxford University Press (2000)
- 2. Eban S. Goodstein, Economics and the Environment, 3rd Edition, John Wilev

ECON 413 Tax Policy and Tax Administration

The topics covered in this course include the following; the administrative system of income and sales taxes in Pakistan; issues in assessment, collection and appeals in the area of income tax; withholding taxes in income tax and the need for reform; issues of interface between taxpayer and tax administrators; issues in documentation, collection, refunds, audit and appeals in the area of sales tax and an outline of a reform agenda. The main objectives of the course are to introduce students to the administrative practices in income and sales taxes in Pakistan; to assess whether these tax practices are in consonance with the principles of sales and income taxation; to understand the limitations of the tax processes as a first step towards suggesting a reform of the system; to understand the problems of both the tax administrators and taxpayers and see how the interface between the two could be improved and to suggest reform of the tax processes, keeping in mind both the need for revenue for the State and the convenience of the taxpayers.

ECON 414 General Equilibrium and Welfare Economics

The nature of general equilibrium analysis, General Equilibrium Theory: Multi market equilibrium in a competitive setting; Walras Law; Existence of equilibrium; Stability of equilibrium; Money in a general equilibrium setting. Technical and allocative efficiency and case of exchange economy. Linear programming technique to general equilibrium theory (Activity Analysis). The Von-Neuma Model of a expanding economy, The input-out Model. Pareto principle, optional, production and

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resource allocation and efficiency of Perfect Competition. Measurement of Changes in Welfare: Consumer Surplus, Compensation Principle. The Theory of Social Choice: Social welfare function, Arrow's Impossibility Theorem, Marginal cost pricing, Joint Products, Externalities, Income distribution and compensation principles. Theory of second best and its application in Public Sector and international trade.

Recommended Books

- 1. Mas-Colell, Whinston and Green, Microeconomics Theory, Oxford University Preses, 1995.
- 2. Arrow and Hahn, General Competitive Analysis, San Francisco, Holden-Day 1971.
- 3. Jehle, G.A., & P.J. Reny, Advanced Microeconomics, Theory, 2nd edition, Addison Wesley, 2001
- 4. Varian, H., Microeconomics Analysis, Norton 1992 (3 edition)

ECON 415 Comparative Economic Systems

Evaluation of Economic Systems

Classification of Economic Systems, Historical Development Criteria for Evaluation of an Economic System. Basic Differences between Economic System.

Capitalism

Definition, Historical Development, Pre-Requisites of Capitalism, Competitive and Monopoly Capitalism. Economic Institutions of Capitalism. Distinction between private and Public Property and Production, Price System, Profit Maximization/Cost Minimization and Competition. Economic Decision Making under Capitalism. Evaluation of Capitalism in USA and Europe Capitalism, Market System and Environmental Problems.

Communism and Socialism

Meaning and Nature, Communism and Power to the Centre. Concepts of Ownership and Production. Various types of Communism, Marxism, Socialism, Economic Planning and Decision Making. Achievements and Failures, Communism / Socialism in USSR, China and Other parts of the World. Modern Trend and its failure, Convergence of Capitalism and Socialism. Present Status of Socialism.

Economic System of Islam

Distinctive Features, Basic Economic Values of Islam. Economic Institutions and their Role, Property Rights, Production and Distribution System. The Concept of Welfare State. Comparative Analysis: Islamic System, Capitalism and Communism.

Economic System in Pakistan

Brief Economic History of Pakistan. The Mixed Economy, Nationalization and its Impacts. Operations under Mixed Economy, Privatization and Liberalization in the 1990's and 2000's. Islamisation in Pakistan: Process and Problem, Achievements and Experience. Islamic Economics as Global System of Equity and Welfare.

Recommended Books

- 1. Capitalism, Socialism and Islam by Syed A. Ala Maududi, Islamic Book Publisher, Lahore.
- 2. Comparative Economic System by William, Louks and William G. Whitnery (latest edition).
- 3. Comparative Economic Systems by Martin C. Schmeltzer and James W. Hordyke (1977).
- 4. Economic System of Islam by M. Omer Chapra.
- 5. Islam or Socialism by Wilicaynaki.
- Comparative Economic Systems by Gregory, Stuart, Houghton Mifflin Company, Boston (1985).

Assistant registrar Academics

ECON 416 Applied Economics and Computer Application

Introduction to Windows 2000 and Ms-Word

Operating System, Performance Management, Desktop Management, Printer Management, Internet Explorer, E-mail. MS-Word, using Advanced Formatting Features, Sharing data with Word, Word Macros, Composing Models and Mathematical Equations.

PowerPoint and MS-Access (XP)

Database Concepts, File Linkages, Data Retrieval, Data Editing / Updating. Data Transferring.

SPSS and E-View

Menu, Tool Bars, File Linkages, Dialog Boxes. Data Analysis, Analysis of Variance. Simple and Multiple Regression Analysis, Formatting Reports, Creation and Modification of Chart, Line Area and Pie Chart. Output Navigator Printing, Data Editor Printing, Command Syntax Printing. Use of E-view for Model Estimation.

Estimation of Production Function

Use of Computer, SPSS, E-View to Estimate Production Functions. Cob-Douglas Production Function, Constant Elasticity Production Function etc.

Computer Applications: Demand - Supply & Equilibrium

Estimation of Demand and Supply using E-View / SPSS. Aggregate Demand – Aggregate Supply and Equilibrium.

Model Building and Estimation

Building Simple Econometric Models and Estimation. Single Equation Models, Multiple / Simultaneous Equation Model. Interpretation of Computer Output.

Project Appraisal and Computer Application

Use of Computer Programming (Softwares), E-View etc. for Cost-Benefit Analysis, Estimation of Present Values, Estimation of Economic and Social Benefits. Project Appraisal Using E-View etc. Estimation of Cost Functions and Decision Making.

Econometric Analysis and Computer Applications

Regression Functions. Estimation with Qualitative Variables Confidence Interval and Hypothesis Testing. Estimation and Improving Model Estimates: Autocorrelation, Estimation of Simultaneous Equations. Estimation of VAR and ARIMA Models.

Recommended Books

- 1. E-View Manual, (Learning help available with package (software)).
- 2. Gimi, Carter and Annette, Marquis, with Karl Browning, Mastering Microsoft Office XP Premium, Selection B.P.B., Publishers, New Dehli , (2001).
- 3. Robertson, D.F., Computer Applications and Programming, Har Brace Jovanovich Inc. USA (latest edition).
- 4. SPSS-Manual.

ECON 417 Major Issues in Pakistan's Economy

Overview of Pakistan Economy

Development Experience, Approaches, Policies and Outcomes. Identification of Issues: The era of 1950's, 1960's, 1970's, 1980's 1990's and 2000's. Structural Change and Sources of Growth. Emergence of Economic Issues, Human Resource Development, Unemployment, Poverty, Income Distribution, Debt, Deficit etc. Growth with limited development in Pakistan.

Development Planning and Resource Mobilization

Assistant Registrar in a law and

Agricultural Development Policies and Priorities, Major Targets of Develop Plans and Emerging Issues; Neglects and Successes: Mobilization of Domestic Resources; Shortages, Deficits and Role of Foreign Aid. Agricultural Vs. Industrial Development Debate. Agricultural Adequacy.

Agriculture and Industrial Development: Emerging Issues Pattern of Agricultural and Industrial Development, Land Reforms and Its Impacts, the Role of Green Revolution and its Impacts: Present Status. Agricultural Price Policy and Income Tax. Sectoral Terms of Trade. Industrial Development Policies and Strategies. Development of Large and Small Industries. Value Added: Manufacturing Goods Vs. Primary Goods Production. Agriculture Vs. Industry: Development Debate.

Sectoral Development, Employment Pattern and Unemployment Sectoral Priorities and Development Issues. Human Resource Development and Emerging Issues: Population Growth, Labor Force Participation Rate and Employment Pattern, Unemployment and Underemployment, Forecasting Manpower Needs and Employment. Strategies to combat unemployment. Criteria to Measure Unemployment / Underemployment: Time Criterion, Productivity Criterion and New Index of Unemployment: Application to Pakistan and Empirical Evidences. Good Governance, Social Action Plan and its Impact. Role of Institution in Development. Social Sectors development Vs. High Return Sectors: Growth trade off.

International Debt and Dependency

Concepts of Foreign Aid and Debt. Borrowing Vs. Domestic Reserve Mobilization (failure). Size of Foreign Debt, Debt Saving and its Impacts. Strategies to combat with High Debt: Saving Policy, Foreign Trade Promotion, Cutting non-development Expenditures, Rescheduling and its Impacts. Debt Management in Pakistan and Its Impacts. Debt Modeling and Future Implications.

Poverty and Income Distribution

Pattern of Income Distribution: Rural and Urban. Definitions and Approaches to Measure Poverty: Income Approach, Expenditure Approach, Basic Needs Approach, Poverty of Participatory Index (POPI). How to Combat Poverty; Growth Strategy, Basic Needs, Labor Intensive Investment: Education / Training etc. and Social Action Plan (SAP), its Role and Critical Review, Evasion of Policies / Strategies to Combat Poverty and Improving Income Distribution: Critical Evaluation. Neglect of Human Resource Development. Child Labor. Factors Productivity Issues.

Inflation, Foreign Trade Deficit and Emerging Issues

Sources of Inflation in Pakistan. Policies to Combat Inflation and their Impacts. Trade Performance, Instability and its Impacts. Policies to Combat Deficit and Trade Instability. WTO and Its Impacts. Reforms and Further Needs. Expected Impacts of WTO and Challenges. Terms of Trade Issues, Market Access and Health Related Rates.

Recommended Books

- Aslam M., Perspective on Development Planning In Pakistan, Allied Book Centre, Lahore, 2001-2002.
- 2. Chaudhary M. Aslam and Ahmad Eatzaz: Globalization, WTO and
- 3. Trade Liberalization in Pakistan, FerozSons, Lahore (2004).
- 4. Chaudhary M. Aslam, Human Resource Development and
- 5. Management in Pakistan, Ferozsons, Lahore (1989).
- 6. Khan, Shahrukh R., 50 Years of Pakistan's Economy Traditional Topics and Contemporary Concerns. Oxford Univ. Press, Karachi (2000).
- 7. Mahbool-ul-Haq Centre for Human Development (MHCHD), Poverty Profile of Pakistan, (1989) Oxford University Press.

University of Stalakand

- 8. ----- Human Development In South Asia, Annual Report.
- 9. Saeed, Khawaja Amjad, The Economy of Pakistan, Karachi: Oxford University Press, 2004.
- 10. Zaidi, Akbar, (1999), Issues in Pakistan Economy, Oxford Univ., Press, Karachi.
- 11. World Development Reports, World Bank.

ECON 418 Rethinking Development

International Debt, Aid / Assistance, Debt Crises and New Role of World Bank and IMF

Why international borrowing? Two Gap Model, Aid commitments and disbursement. Sources of borrowing. Debt Cycle Theory/Stages. Debt Burden: Debt Servicing, Debt laffer Curve, Debt buy back etc., Latin American Debt Crises, ASEAN Crises, Debt Problem of LDC's and South Asia, Debt Overhang and threat to growth. Policies to combat debt problem: Forecasting debt and solution for debt burden, saving mobilization/Domestic resource mobilization, Debt rescheduling etc. Debt Modeling and Forecasting Future Implication. Solution to debt Problem.

Resource Mobilization and Industrialization

LDC's Inflation and Deficit B.O.P Problem. Savings and forced savings. Direct and indirect taxation, Transfer of resources from agricultural to industry. Migration and its role. Urban unemployment. Industrialization and Small Manufacturing enterprises (SME's). Human Capital and its development / productivity.

Multinational Corporations (MNC'S), FDI and Development

Multinational Corporations (MNC's): Objectives, Role and Contributions, Long term cost of TNC's. Transfer of Technology: Ways and Means. Global integrated production system: MNC's and Globalization, Foreign Direct Investment (FDI) and Its Determinants/Role. Foreign Direct Investment (FDI) and MNC's. Flow of FDI and its contributions.

Poverty and Income Distribution

Definitions and Measurement of Poverty/Poverty Line. Poverty concepts/definitions. Absolute Poverty, Relative Poverty, Income approach, Expenditure approach, Basic needs approach, Poverty of Opportunities Index (POPI) and Calorie-based approach etc. Poverty Indicators. Poverty by socio-economic groups. Sources, impacts and policies to combat poverty. Strategies and tools to combat poverty. Growth and Income Inequality in the world. Empirical evidences on poverty. Redistribution with growth. How to combat income inequality. Basic Needs, Social Action Programs and Poverty alleviation.

Environment and Development

Model of Environment and Economic Activity. Market Based Approach and Externalities. Deforestation and Renewable Resources, Measuring environment values. Deforestation and Macroeconomic Environment. Industrialization and its environmental cost, Use of Pesticides and Environmental Impacts. Natural resources degradation. Cost of Poll utions/Environ mental degradation. International awareness about environment, production and need for Reforms. Economic thoughts and Environment. International Agencies: Environmental concerns and programs. Urbanization and environmental issues. Sustained development, Ecology and economic progress.

WTO, Liberalization and International Trade

Trade vs. Aid. Liberalization of Trade and its impacts/gains etc., Trade led Growth, Foreign Exchange Constraints and Balance of Payment deficit. Role of GATT and its Failure. WTO and LDC's. Trade Instability, Distribution of gains from Trade liberalization. Regional Trade Associations (RTA's): their role and contributions. Basis for trade and benefits: Gains from Trade: Static and Dynamic Gains. Comparative Advantage, Revealed Comparative Advantage and Competitiveness. Trade as an engine of growth. Product Cycle. Determinants of exports

Assistady Registrary Academics

growth. Transfer of Technology: Sources & Need. Technology Centered Development and Appropriate technology issue.

Growth Models:

Harvard – Dormer Model, Neo-classical growth theory, Technical change, endogenous growth. Institutional Economics, Institution's and Market, Good Governess, Role of Institutions in Economic Development. Institutions and LDC's.

ECON 419 Political Economy and Global Order

Introduction

Meaning, Definition and brief Introduction of basic Concepts of Political Economy. Economic and Political Integration. Policy Reform and Popular Organization, key Social and Economic Indicators. Political and Economic Institutions and their role in decision making. Linkages of Politics and Economics. Conceptualizing the Changing Global Order.

Political Economy and World Order

Problem of Power and Knowledge: New Millennium, Knowledge, Politics and Neo-Liberal Political Economy. New Voices in the Globalization Debate: Green Perspective, Regional Phenomena and State Order, New State Actors, Theory of Exclusion.

Regional Dynamics

Regionalism and Globalization, The Political Economy of European Integration, Regionalism in the Asia-Pacific Political Globalization and the Competition State. Economic Blocks and Political Blocks.

Political Economy of Economic Development

International Politics and Transfer of Technology, Sector Specific Development Limitation. Agriculture and Industry, Political Slogans and their Implementation, International challenge of poverty, The Political Economy of food grain prices, Rural Development. Regional Exporting Blocks and their Markets.

Political Economy of Pakistan

The Economics of Patronage, Seven Pillars of good Governance. The Political Economy of Reforms. Pakistan - Dynamics of Elitist Model. Strategies for self-preservation, A military Theocracy, Different Regimes, Economic Development, Ethnic conflict, the Role of State. Emerging Economic and Political Issues and their linkages. Regionalism, Poverty and Governance etc.

SAARC: Political & Economic Aspects

Economic Aspects, Poverty Eradication, Trade & Economic Cooperation, Pakistan and SAARC: Composition of Trade, Foreign Trade Trends in External Trade, Direction of Foreign Trade, Trends of Trade with SAARC. Future Economic Prospects of SAARC.

Issues in Lawlessness and Development

Introduction, Economic Crimes, Terrorism & Insurgency, Theories of the Economic impact of Law & Order.

Socio Economic Developments & Crime

A Review of Socio-Economic Situation in Pakistan, Urbanization, Housing, Unemployment, Poverty, Juvenile Delinquency, Health Hazards. Environment and Externalities.

Global Issues

Global Issues in Historical Perspective, Capital Mobility and Global Order, Opening up of Services Sector and its benefitries. Will there be free mobility of factors of production? Capital, labor and entrepreneurs etc. Multinationals: Objectives, Contribution and their Mobility. Emerging World Financial Order. The Group of Seven and Political Management of the Global

Economy, Big Businesses and New Trade Agreements, Trade Blocks.

- Azhar, H. Nadeem (2002), Pakistan: The Political Economy of Lawlessness, Oxford University Press.
- 2. Gupta, S. Dev, The Political Economy of Globalization, Kluwer Academic Publishers. (Latest eds.)
- 3. Hagen Everett E., The Economics of Development, Richard D. Irwin, Inc. (Latest eds.).
- 4. Hussain Ishrat, (2004), Dollars, Debt and Deficits, Reform and Management of Pakistan Economy, Oxford University Press.
- 5. Hussain Ishrat, (1999), Pakistan, the Economy of an Elitist State, Oxford University Press.
- 6. Kardar Shahid, The Political Economy of Pakistan, Progressive Publishers, Pakistan.(Latest eds.).
- 7. Kher, R.S. (2004), SAARC: Political & Economic Aspects, Dominant Publishers and Distributors.
- 8. Noman Omar (1988), The Political Economy of Pakistan 1947-1985, KPI, London and New York.
- 9. Stubbs Richard and Underhill Geoffrey R.D., (2000), Political Economy and the Changing Global Order, Oxford University Press.
- 10. Szentes J., The Political Economy of Underdevelopment, Akademiai Kiado, Budapest.(Latest eds.).
- 11. Black, David H. & Robert S. Walters; The Politics of Global Economic Relations 1994
- 12. Crane, George T. & Alba Amawi; The Theoretical Evaluation of International Political Economy, Oxford University Press,
- 13. Galbraith, John Kenneth; Economic Progress and Policy of Developing Countries, London

EONO 420 Natural Resource Economics

Objectives

This course aims to provide the students a broad introduction to the economics of natural resources and the environment. It intends to develop a systematic understanding of the economic rationale behind the optimal use of natural resources, Pricing of market and non market resources, application of environmental policy instruments, economic valuation principles.

Course Contents

Economics and the environment. Resource scarcity, prices, demand and supply of natural resources. Market equilibrium, economic efficiency, inter-temporal efficiency, property rights. The economics of pollution, natural resource exploitation. Optimal utilization of renewable and non-renewable natural resources. The economic concept of value and measurement of environmental and natural resource benefits using non-market valuation methods. Economic approaches to conservation of natural resources. Policy instruments to address resource allocation and environmental problems. Benefit cost analysis.

Recommended Books

- Randall, A. 1987. 'Resource Economics' An Economic Approach to Natural Resource and environmental Policy. John Wiley and sons, Inc. New York.
- Compathy, R. S. and R. S. Ganapatty, 1990. Natural Resource Management' Mohan Primlani for Oxford and IBH Publishing Co. New Delhi.
- 3. Jon M.Conard. Resource Economics. Cornell university, New York

 CC - Conrad, Jon M., and Colin W. Clark, Natural Resource Economics: Notes and Problems, Cambridge: Cambridge University Press, 1987.

 HNREE-III - Kneese, Allen V. and James L. Sweeney (eds.), Handbook of Natural Resource and Energy Economics, Volume II, Amsterdam: North-Holland, 1993.

Optional Non-Economics

ECON 109 Principles of Accounting

Introduction to Accounting

Purpose and Nature of Accounting, Various areas of Accounting Forms of Business enterprises, Basic accounting terminologies, generally accepted Accounting principles, Accounting System, Accounting Equation (Balance Sheet Concept), Accounting cycle.

Recording the business transactions

Vouchers, Journal, Ledger and Trial Balance, Subsidiary Ledgers for sales, purchases, cash, banking transactions, Bank Reconciliation.

The periodical adjustment and closing process of accruals, deferrals, inventory, depreciation, uncollectible and correction of errors, Capital and Revenue. Provision and Reserve.

Financial Statements

Income Statement, Balance Sheet, Cash Flow Statement (Direct Method), Statement of owners' equity, The Worksheet.

Depreciation

Depreciation Methods and Accounting Treatment.

Corporation and Joint Stock Company

Joint Stock Company Salient Features, capital, issue of shares and debentures and their presentation in the balance sheet. Stockholder's Equity statement, Measuring Corporation Income, Earnings Per Share, Cash Dividend,

Measuring Cash Flows

Statement of Cash Flows and Classification of cash flows, preparation of Cash Flows.

Capital Budgeting

Financial and Nonfinancial Consideration. Evaluating Capital Investment Proposals. Payback Period. Return on Average Investment. Discounting Future Cash Flow

Core readings

- 1. Meigs and Meigs, Accounting. The Basis for Business Decisions McGraw-Hill Book Company.
- 2. Robert F.Meigs and Walter B.Meigs: Accounting: The Basis for Business Decisions, McGraw Hill, Inc.

Reference Books

- Eric G. Flamholtz, Diana Troik Flamholtz, Michael A.Diamond: Principle of Accounting, Macmillan Publishing Co. New York
- 2. M. Arif & Suhail Afzal, Accounting, Azim Academy Lahore.
- 3. Ghani M. A, Principles of Accounting, Salman Publishers, Lahore.
- 4. Imdike, Hemkep & Smith, Principles of Accounting.
- 5. Niswonger and Fess Accounting Principles South-Western?
- 6. Ch. Muhammad Hanif and Azam Shafiq, Fundamentals of Accounting, Etisam Publishers, Urdu Bazar, Lahore.



ECON 110 Principles of Business Finance

Introduction, Business Environment, forms of Business Organization

An overview of financial management

The financial environment: markets, institutions and interest rates

Financial statements

Time value of money concepts

Sources of short term finance

Sources of long term finance

Financial Planning and introduction

Working capital management-an overview

Cash and marketable securities

Accounts receivables and inventory

Emergence of Islamic finance-Internal perspectives (Managerial approach)

Recommended Books

- 1. Jemes C. Vanhorne: Fundamentals of Financial Management
- 2. Eugene F. Brigham: Fundamental of Financial Management

3

ECON 111 Sociology 3

ECON 112 Education 3

ECON 113 History

ECON 114 International Relations

ECON 115 Political Science 3

ECON 211 Fundamentals of Financial Management

Introduction

Nature, scope and functions, financial decisions areas, Objectives of financial management Working Capital Management: Concepts and components, Determinants of working capital requirements, Working capital conversion cycle and identification of business risk.

The Valuation Concepts

the valuation process, the fundamental valuation model, Valuation of securities: Bond, preferred stock. Analysis of Financial Statements: Ratio Analysis, Trend Analysis, Common Size Analysis, Index Analysis

Financial Markets

An Overview: Money market: Institutional framework with reference to Pakistan, Capital Markets, Primary vs secondary markets, Organized vs over the counter market, Investment banking & public securities issue, Private placement, Role of financial markets in Pakistan.

Sources of Finance

Cost of Capital

Cost of Debt, Cost of Equity, Weighted Average Cost of Capital, Weighted Marginal Cost of Capital, Budget Constrained and IOS

Capital Structure

Leverage Analysis, Theory and Analysis.

Risk and Return

Risk Behaviour, Return, Risk Measurement

Capital Budgeting-an overview

Lease Financing



- 1. James C. Van Horne: Financial Management & Policy, Prentice Hall.
- 2. Weston & Brigham: Financial Management, The Dryden Press.
- 3. Gitman: Managerial Finance.
- 4. Block & Heart: Foundation of Financial Management

ECON 212 Psychology 3 ECON 213 Geography 3 ECON 214 Philosophy 3

ECON 310 Money, Banking and Financial Institutions

The course discusses financial processes emphasizing the role of the financial intermediaries. Particular emphasis is on banking sector, implications for economic growth and stability, monetary policy in Pakistan, and the role of the State Bank of Pakistan. Other financial intermediaries such as insurance companies, brokerage houses, mutual trusts, and Modarabas will also be discussed.

Introduction and Development of Monetary Mechanism

Evolution of Money and Payment System, Definition of Money, Function of Money & Measurement of Money, Demand for Money & Supply of Money. Definitions of Money, M1, M2, M3, L etc.

Role of Money in the Economy

Debate on neutrality and non-neutrality of Money. Classical Dichotomy and Keynesian Integration of Nominal and Real Sectors. Role of Money in the IS-LM Framework. Money in Aggregate Demand & Aggregate Supply Analysis. Keynesian Vs. Monetarist views of Equilibrium Output, Employment and Prices.

Demand for Money

Quantity Theory of Money. Transaction Theories of Demand for Money. Portfolio Theories of Demand for Money. Baumol – Tobin Model of Cash Management. Friedman's Restatement of Quantity Theory of Money.

Theory of the Role and Functioning of Financial System

Information asymmetric and the need for the role of financial sector. Some Basic concepts like adverse selection, moral hazard, free rider and principal-agent problems in financial sector to understand puzzles of financial markets. Financial system and its relationship with the rest of the economy. Functions of financial sector: mobilization and allocation of resources; pooling, diversification and trading of risk; advisory role; financing technological innovation and development. Financial Repression vs Financial Liberalization.

Financial Institutions and Current issues

Scheduled Banks and their role in economic development of Pakistan: Introduction to commercial banking; structure of commercial bank in Pakistan; Assts and Liabilities of a commercial bank; performance indictors for commercial banks; recent issues in commercial banking.

Non-bank Financial Institutions: Development Financial Institutions, Investment Banks, Modarbas, Leasing companies, Mutual Funds, Housing Finance Corporations, Discount Houses, Venture Capital Companies.

Micro Finance Institutions, SME Banks

Insurance Companies – the rationale and role.

Financial Markets and Current Issues

Functioning of Money Market (Primary and Secondary Dealers Capital Market (Stock exchanges and Various Components of capital markets – Securities, equities, bonds, debentures) Foreign Exchange Market and its evolution, dollarization of the economy.

Recommended Books

- 1. Fabozzi, F. and Modigliani, F. Capital Markets. 2nd edition. Prentice-Hall London (1996).
- 2. Mishkin (2003), The Economics of Money, Banking, and Financial Markets. 7th edition.
- 3. Ritter, L. S. and Peterson, R.L. Financial Institutions and Financial Markets. 9th edition. New York. Basic Books.
- 4. Arby, Muhammad Farooq (2004), "Functions, Evolution and Organization of State Bank of Pakistan" www.sbp.org.pk
- 5. History of State Bank of Pakistan (Volume 3, chapters 2 to 7, 13).
- 6. Zaidi, Akber (2005), "Issues in Pakistan Economy," Karachi. Chapters12, 13
- 7. SBP Annual and Quarterly Reports
- 8. SBP Financial Sector Assessment: 1990-2002, 2003 and onward.

ECON 311 Values and Ethics in Business

VALUES, ETHICS & SOCIETY

Ethical Dilemmas in Business

The Meaning of Ethics. Business should be ethical, Business Ethics across organizational functions, Why Ethical problems occur in business, Ethics in a Global Economy, Ethics, Law & illegal corporate behavior.

Business & public Issues

Why Public issues matter?, The public issues life cycle, Managing issues, Crises management, Strategic management of stakeholders.

Corporate social responsibility

The meaning of corporate social responsibility, Forms of corporate social responsibility, The limits of corporate social responsibility, Balancing Economic, Legal & social responsibility.

Ethical principles & Decision making guidelines

Ethical relativism, Utilitarianism, Universalism, Rights, Justice.

The Employ-Employer relationship

The Govt. role in the employment relationship, Employees' rights & responsibilities, Testing to control employees' actions.

Consumer protection

Pressures to promote consumer interest, How Govt. protects consumers, The social dimensions of advertising, Positive business responses to consumerism.

Business Ethics into the 21st century

The future of business & ethics, Fundamental changes for the future of business ethics, Global Ethics.

Recommended Books

- 1. Business & Society by James E. Post et al.
- 2. Business Ethics by Joseph W Weiss.
- 3. Ferrell, O.C., and Fraedrich, John, Ethical Decision Making and Cases, New York: Houghton Mifflin

ECON 312 Statistics

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University of Italahand

Introduction

Definition of Statistics, Population, sample Descriptive and inferential Statistics, Observations, Data, Discrete and continuous variables, Errors of measurement, Significant digits, Rounding of a Number, Collection of primary and secondary data, Sources, Editing of Data.

Presentation of Data

Introduction, basic principles of classification and Tabulation, Constructing of a frequency distribution, Relative and Cumulative frequency distribution, Diagrams, Graphs and their Construction, Bar charts, Pie chart, Histogram, Frequency polygon and Frequency curve, Cumulative Frequency Polygon or Ogive, Historigram, Ogive for Discrete Variable. Types of frequency curves.

Measures of Central Tendency

Introduction, Different types of Averages, Quantiles, The Mode, Empirical Relation between Mean, Median and mode, Relative Merits and Demerits of various Averages. Properties of Good Average, Box and Whisker Plot, Stem and Leaf Display, definition of outliers and their detection.

Measures of Dispersion

Introduction, Absolute and relative measures, Range, The semi- Inter-quartile Range, The Mean Deviation, The Variance and standard deviation, Change of origin and scale, Interpretation of the standard Deviation, Coefficient of variation, Properties of variance and standard Deviation, Standardized variables, Moments and Moments ratios. **Probability and Probability Distributions.**

Discrete and continuous distributions: Binomial, Poisson and Normal Distribution. Sampling and Sampling Distributions

Introduction, sample design and sampling frame, bias, sampling and non sampling errors, sampling with and without replacement, probability and non-probability sampling, Sampling distributions for single mean and proportion, Difference of means and proportions

Hypothesis Testing

Introduction, Statistical problem, null and alternative hypothesis, Type-I and Type-II errors, level of significance, Test statistics, acceptance and rejection regions, general procedure for testing of hypothesis

Testing of Hypothesis- Single Population

Introduction, Testing of hypothesis and confidence interval about the population mean and proportion for small and large samples.

Testing of Hypotheses-Two or more Populations

Introduction, Testing of hypothesis and confidence intervals about the difference of population means and proportions for small and large samples, Analysis of Variance and ANOVA Table.

Testing of Hypothesis-Independece of Attributes

Introduction, Contingency Tables, Testing of hypothesis about the Independence of attributes.

Regression and Correlation

Introduction, cause and effect relationships, examples, simple linear regression, estimation of parameters and their Correlation. Coefficient of linear interpretation. r and R correlation, its estimation and interpretation. Multiple regression and interpretation of its parameters.

Recommended Books

 Walpole, R. E. 1982. "Introduction to Statistics", 3 Ed., Macmillan Publishing Co. Inc. New York. 2. Muhammad, F. 2005. "Statistical Methods and Data Analysis", Kitab Markaz, Bhawana Bazar Faisalabad.

ECON 313 Mathematics

Complex Number and Circular Functions

Imaginary and Complex Numbers. Complex Roots. Circular Functions. Properties of Sine & Cosine functions. Eular Relations. Alternative Representation of Complex Numbers.

Integral Calculus

Dynamics and Integration. The Nature of Indefinite Integrals, Basic Rules of Integrations & Rules of Operation. The Substitution Rule and the Rule of Integration by Parts. Definite Integrals. Major Properties of Definite Integral. A Definite Integral as an Area Under a Curve. Improper Integrals. Economic Applications of Integrals – Finding Total Functions from Marginal Functions, Investment & Capital Formation, Present Value of Cash Flow. Present Value of a Perpetual Flow, Domar Growth Model.

Differential Equations: Continuous Time

First Order Linear Differential Equations

Meaning and Definition; Homogenous & non-Homogenous Cases. Solution of First Order Linear Differential Equation with Constant Coefficient & Constant Term and its Verification. Economic Application: Dynamics of Market Price. Solution and its Verification of First Order Differential Equation with Variable Coefficient and Variable Term. Exact Differential Equation, its Solution and Verification. Non-linear Differential Equations of the First Order and First Degree. Bernoulli Equation, Separable Variables. The Qualitative Graphic Approach. Concept of Phase Diagram, types of Time Paths and their Dynamic Stability. Economic Application: Solow Growth Model.

Differential Equations

Higher Order Differential Equations Solution and Verification of Second order Linear Differential Equations with Constant Coefficient and Constant term-Distinct Real Roots, Repeated Real Roots and Complex Root Cases. Dynamic Stability of Equilibrium. Economic Applications. A Market Model with Price Expectations. The Interaction of Inflation and Unemployment. Solution of Higher order Differential Equations with Constant Coefficient and Constant Term. Convergence and the Routh Theorem.

Difference Equations; Discrete Time

First Order Difference Equations

Solution and its Verification of First Order Difference Equations. The Dynamic Stability of Equilibrium. Economic Applications – The Cobweb Model, A Market Model with Inventory. Nonlinear Difference Equations – The Qualitative-Graphic Approach. Phase Diagrams Types of Time Path. A Market with a Price Ceiling.

Higher Order Difference Equations

Solution and Verification of Second-Order Linear Difference Equations with Constant Coefficients and Constant Term-Distinct Real Roots, Repeated Real Roots and Complex Roots cases. The Convergence of the Time Path. Economic Applications, Samuelson Multiplier-Acceleration Interaction Model. Inflation and Unemployment in Discrete Time. Higher Order Linear Difference Equations and their Solutions. Convergence and Schur Theorem Again. The Solution of Simultaneous Differential Equations.

Non-Linear Programming

The Nature of Non Linear Programming Non-Linearities in Economics. Kuhn Tucker Condition. Interpretation of Kuhn Tucker Condition. Kuhn Tucker Sufficiency Theorem: Concave Programming. Arrow Enthoven Sufficiency Theorem: Quasiconcave Programming. Economic



Application-Utility Maximization, Least Cost Combination. Solving a Nonlinear Program via the Kuhn-Tucker Conditions.

Recommended Books

- 1. Chiang A.C. Fundamental Methods of Mathematical Economics McGraw Hill (3rd Edition) 1984.
- 2. Dowling Edward T. Mathematics for Economics Schaum Series, 1981.
- 3. Glass Colin J.An introduction to Mathematical Methods in Economics McGraw Hill.
- 4. Haung David, S., Introduction to the set of Mathematics in Economic Analysis Graphical Approach, Simplex Method, Economic Application of linear Programming N-Y John Wiley and Sons, latest edition.
- 5. Hoy M., Livermois J, Rees R, Stengos T., Mathematic for Economics, 1996. Addison0Wesley Publishers limited.
- 6. Weber E. Jean, Mathematical Analysis, Business and Economic Application (latest edition), Harper and Row Publishers, Netherlands.
- 7. Allen R.G.D., Mathematical Economics, London, Macmillan English Language Book Society.
- 8. Edey & Peacock, National Income and Social Accounting London, Hutxchinson.

