

## Syllabus for M.A Economics (Previous)

### **Paper I; Micro Economic Theory**

**1. Introduction:** Introduction to Microeconomics, Subject matter of Microeconomics

#### **2. Theory of Consumer Behavior**

Preferences, Cardinal & Ordinal Approach, Consumer Equilibrium, Comparative Static Analysis, Derivation of Compensated and Uncompensated Demand Curves, Slutsky Elasticities, Market Demand Curve, Theory of Revealed Preference, Uncertainty and Risk, Decision under Uncertainty, Expected Utility and Risk

#### **3. Theory of Production**

Production Function, Fixed and Variable Inputs, Short-run and Long-run Production, Production with one Variable Input, Graphical Derivation of Total, Average and Marginal Product, Laws of Return, Production with two Variable Inputs, Production with Isoquants and Iso cost Lines, Optimization of Inputs, Elasticity of Substitution, Traditional and Modern Cost Theories in the Short-run and Long-run Cost Curves

#### **4. Theory of Firm and Market Organization**

Pure and Perfectly Competitive Market, Equilibrium of the Firm in Short-run and Long-run, Equilibrium of Industry in Long-run, Derivation of Market Supply Curve, Decreasing Cost, Constant Cost and Increasing Cost of the Industry, Monopoly Market, Short-run and Long-run Equilibrium of Monopoly, Price Discrimination, Bilateral Monopoly, Multi-plant Monopoly, Natural Monopoly, Monopsony, Monopoly and Economic Efficiency, Regulation of Monopoly, Monopolistic Competition, Equilibrium of Firm and Industry under Monopolistic Competition, Oligopoly, Non-collusive Oligopoly, Collusive Oligopoly, Market Solution to Oligopoly

#### **5. General Equilibrium**

Pure Exchange, Edgeworth Box, Pareto Optimality, Contract Curve, Production Possibility Curve, Production Efficiency Equilibrium, Bilateral Equilibrium with Production, General Equilibrium, Disequilibrium in Exchange and Production, Multiple Equilibrium

#### **6. Welfare Economics**

Utility Possibility Curve and Social Indifference Curves, Classical Utilitarian and Walrasian Social Welfare Function, Pareto Optimality in Production and Consumption, Welfare and Competitive Equilibrium, Externalities and Public goods, Welfare and Competitive Equilibrium

#### **7. Theory of Distribution**

Demand for and Supply of Factors of Production, equilibrium in Factor Market under alternative Market Conditions

#### **References:**

1. Koutsoyiannis, A.: "Modern Microeconomics", McMillan, (Latest edition)
2. Ferguson, C.E. and Gould, J.P. "Microeconomic Theory", Richard D. Irwin, Inc.
3. Nicholson, W. "Microeconomic Theory", The Dryden Press, New York.

4. Silberg, Eugene. "The Structure of Economics". A Mathematical Analysis, 2nd , edition, McGraw-Hill Publishing Company, 1990

5. Hirshleifer, J. "Price Theory and Application", Prentice-Hall International edition Handerson, Jame M. and Quandt, E. Richard, "Microeconomic Theory". A Mathematical Approach", McGraw-Hill Company, New York

## **Paper II; Macro-Economic Theory**

### **1. Basic Concepts**

Introduction to Macroeconomics, Subject Matter of Macroeconomics, Brief account of the Development of Macroeconomics after World War-II,

### **2. National Income Accounting**

The concept of Theory and Measurement of National Income Accounts, Product Side and Income Side, Measurement of the Components of National Accounts, Price Indices, Construction and Problems, Real Vs Nominal GNP

### **3. Aggregate Demand and Income Determination**

Equilibrium Output, Consumption & Aggregate Demand, Saving Function, Investment & Aggregate Demand, Determination of Equilibrium level of Income and Output, Effects on Equilibrium of Shifts in Aggregate Demand (Multiplier Analysis) and Changes in Government Spending, Taxes and Transfer Payment

### **4. Consumption Function**

Absolute Income Hypothesis, Relative Income Hypothesis, Permanent Income Hypothesis, Life-cycle Hypothesis, Reconciliation of various Hypothesis, Other Factors influencing Consumption, i.e., role of Interest rate, Price expectation, Wealth and Income distribution

### **5. Theory of Investment**

Capital Stock Vs Investment, Marginal Efficiency of Capital, Marginal Efficiency of Investment, Theories of Investment, i.e., Profit Theory, Accelerator Principle, Role of Interest rate and Finance influencing Investment demand

### **6. Income, Prices and Employment**

Aggregate Demand Curve, Aggregate Supply Curve, Level of Output and Employment, Wages & Prices, Say's Law of Market, Effects of changes in Money Supply and Money Demand on Output and Prices etc., Deviation in Classical and Keynesian Framework, Classical Theory of Output, Interest and Wage Determination, Keynesian Theory of Goods Market Equilibrium (IS Curve), Money Market Equilibrium (LM Curve), General Equilibrium, Shifts in IS-LM Curves

### **7. Inflation, Output and Unemployment**

Theories of Inflation (Cost-Push Vs Demand-Pull Inflation, Philips Curve, Role of Expectations, Trade-off between Inflation and Unemployment in the short-run and longrun, Stabilization Policies (Classical/Keynesian/Monetarist/Neo-classical Debate)

## **8. Growth Models and Business Cycle Theory**

Concepts, Models of Business Cycle (Kaldor, Hicks, Samuelson, Real Business Cycle Theory), Growth Models (Harrod Domar and Solow)

### **References:**

1. Mankiw, N. Gregory: "Macroeconomics", Worth Publishers (Latest edition)
2. Abel, Andrew B. and Bernanke Ben S.: "Macroeconomics", Addison-Wesley Longman, Inc. International Student edition (Latest)
3. Shapiro, E.: "Macroeconomic Analysis", Galgotia Publications (Latest edition)
4. Dornbush, R. and Fisher S.: "Macroeconomics" McGraw –Hill International (Latest edition)
5. Branson, William H.: "Macroeconomic Theory & Policy, 3rd edition, Harper & Row Publishers

## **Paper III; Mathematics for Economist**

### **1. INTRODUCTION:**

Nature of Mathematical Economics, Basic Concepts – constants, variables, parameters and coefficients, Classification of numbers and the Real Number System. The concept of Set, Ordered pairs and Cartesian Products, functions and Relations. Types of functions – Linear, Quadratic, hyperbolic. Logarithmic and Exponential functions, Graphical representation and the idea of domain and range. Equations and Identities, Mathematical Models and their ingredients.

### **2. EQUILIBRIUM ANALYSIS:**

Partial market equilibrium-linear and non-linear model National Income Equilibrium IS-LM Equations and Models

### **3. LINEAR ALGEBRA.**

Vectors and Matrices, Matrix operations- addition., subtraction, scalar multiplication and multiplication of matrices Laws of matrix operations commutative, associative and distributive Laws. Determinants and their properties. Minors and cofactors, Laplace Expansion. Matrix Inversion. Solution of system of linear equations, Cramer's rule for Matrix solution, Input-Output Analysis

### **4. COMPARATIVE STATISTICS AND DERIVATIVES:**

The Concept of Limit Theorems: continuity and differentiability of a function. The derivative and the rules of differentiation. Differentiation of functions involving more than one choice variable Partial and Higher order partial derivatives. Differentials and total differentials. Differentiation of Exponential and Logarithmic Functions, Applications of derivatives in Economics( Total, average and marginal relationships, Elasticities, Production Functions and their average and marginal products. Returns to Scale Cobb-Douglas production function and the constant elasticity of substitution (CES) production functions).

### **5. OPTIMIZATION**

Optimum values and Extreme value, point of Inflection, Relative maximum and minimum. First order and second order conditions for finding extreme values. Profit maximization Unconstrained

optimization of functions with more than one choice variable. First and Second order conditions for optimality under constrained optimization. Utility maximization. Least cost combination of inputs..

#### **6. INTEGRAL CALCULUS:**

Integration, Rules of Integration, definite and indefinite Integration. Economics applications of integral

#### **7. DIFFERENTIAL EQUATIONS:**

First order linear differential equation with constant coefficient and constant term, variable coefficient and variable term

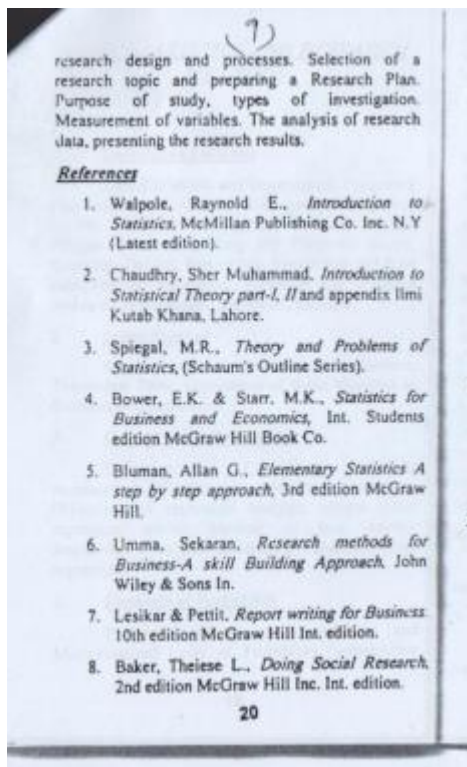
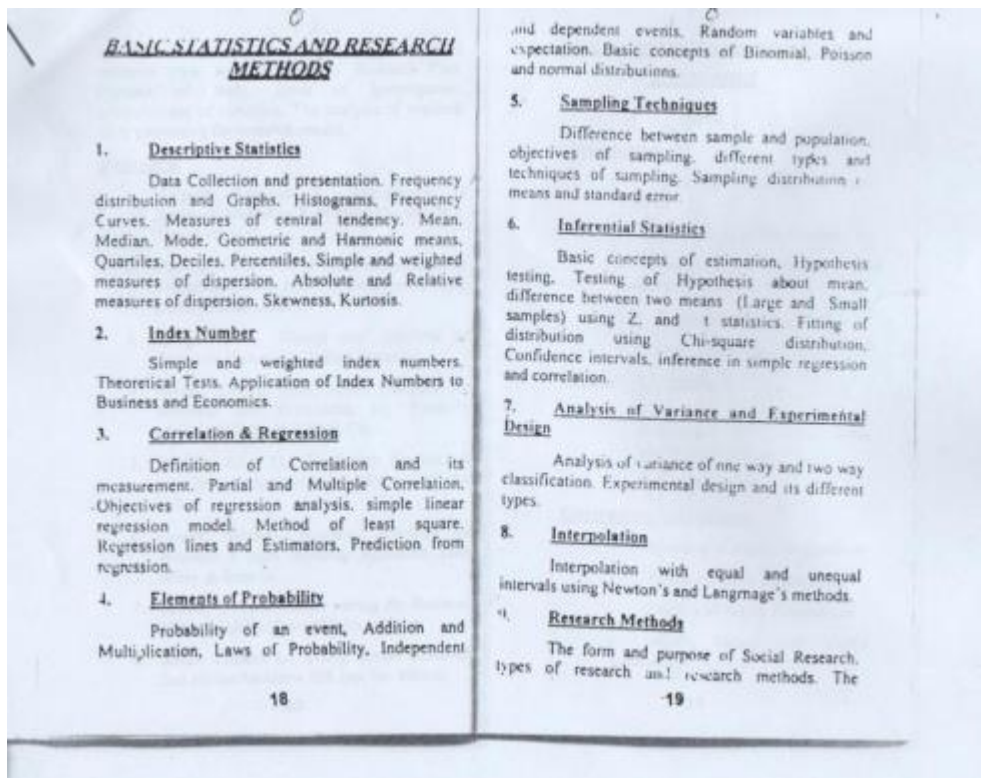
#### **7. LINEAR PROGRAMMING**

Linear , Programming as a special case of Optimization, Graphic solutions, Simplex Method, Duality.

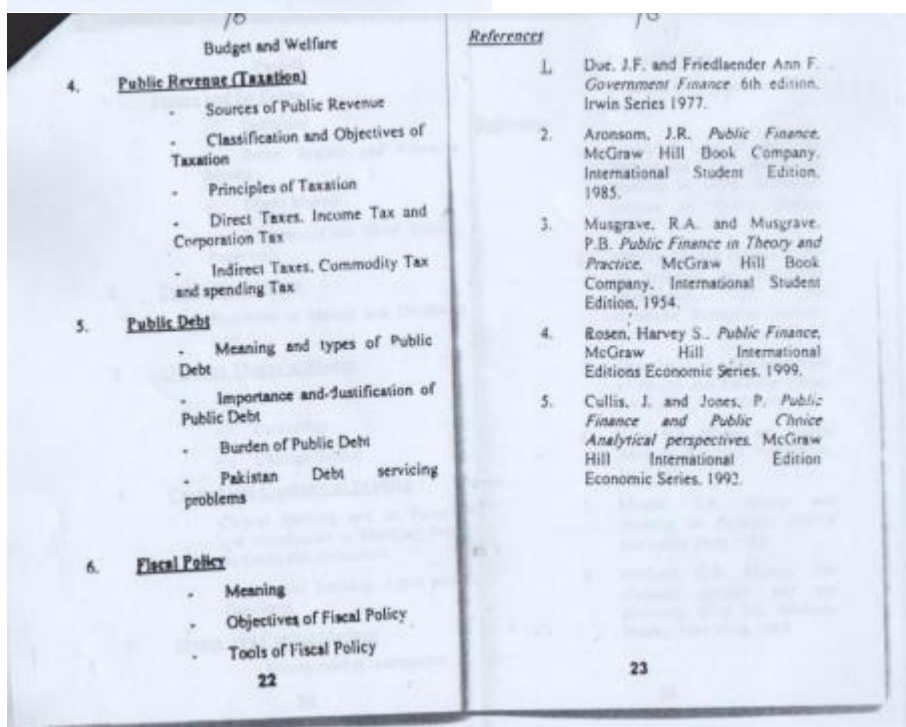
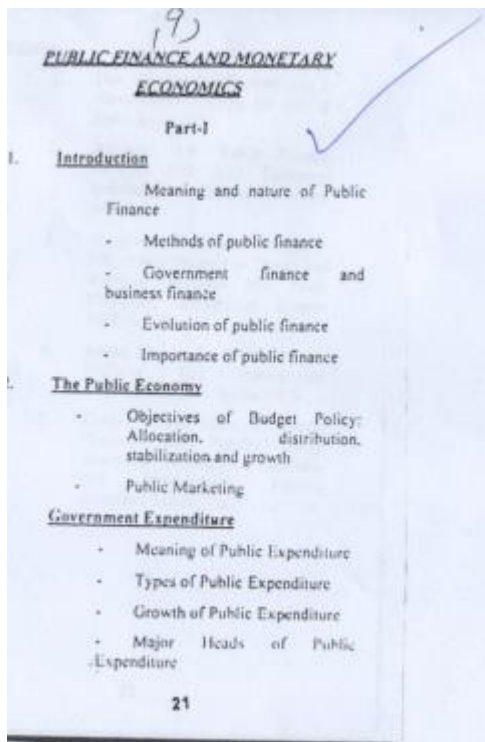
#### **References:**

1. Chiang, A.C. Fundamental Methods of Mathematical Economics. 3rd Edition, McGraw Hill, 1985.
2. Yamane, T. Mathematics for Economists. 2nd edition, Prentice Hall.
3. Allen, R.G.D, Mathematical Analysis for Economists. London, MacMillan ELBS, 1976.
4. Lewis J. Parry Introduction to Mathematics for Students of Economics 2nd edition. The MacMillan press Ltd. 1977.
5. Huang, D.S. Introduction to the use of mathematics in Economic analysis. John Wiley and sons. New York.
6. Reston, M.H. Elementary Matrices for Economics. Routledge and Kegan Paul. London
7. Handerson. Jame M & Auandt. E. Rechard icro-Economic Theory: a Mathematical approach. 2nd edition. McGraw-Hill Kogakusha, Ltd.

## Paper IV; Basic Statistics and Research Methodology



## Paper V; Public Finance and Monetary Economics



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Part-II

1. Money and its Forms

- Definition
- Barter System and Primitive Money
- Credit Money
- Currency, Coin, Gold Bullion, Paper etc.

2. Functions of Money

Functions of Money and Gresham's Law.

3. Quantity Theory of Money

- Fisher's
- Cambridge
- Chicago School

4. Central and Commercial Banking

Central Banking and its Functions and Introduction to Monetary Policy, its Goals and Objectives.

Commercial Banking, Types and its Functions.

5. Money and Capital Markets

Money market Instruments

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- Capital Markets  
- Financial Intermediaries

References

1. Ahmad, Z., Iqbal, M. and Khan, Muhammad F. (eds) *Money and Banking in Islam*. Islamabad: Institute of Policy Studies, 1983.
2. Giersch, H. and Others. *Essays on Inflation and Indexation*. Washington, D.C. The American Enterprise Institute, 1974.
3. Chandler, L.U., *The Economics of Money and Banking*. Harper and Row (Latest edition).
4. Rose, P.S. *Money and Capital Markets*. Business Publication, Inc. 1983.
5. Meenai, S.A. *Money and Banking in Pakistan*. Oxford University Press 1984.
6. Hubbard, G.R. *Money, The financial system and the Economy*, third Ed. Addison-Wesley, New York, 2000.