**Revised Scheme of Studies & Pattern of Papers in the subject of Economics for BA/B.Sc. with effect from the session 2014-2016 & onwards**

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<td><strong>Section-I</strong></td>
<td>Microeconomics (Units: 1 to 6)</td>
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<td><strong>Section-II</strong></td>
<td>Basic Mathematical Economics (Units: 7 to 10)</td>
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**Paper A: Microeconomics & Basic Mathematical Economics (Marks: 100)**

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<td><strong>Section-II</strong></td>
<td>Economy of Pakistan (Units: 7 to 10)</td>
<td>40</td>
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**Paper B: Macroeconomics & Economy of Pakistan (Marks: 100)**

**Note:**

i. The medium of instructions and medium of examination will be English/Urdu

ii. In both papers (Paper “A” and Paper “B”), each question will be consisting of two parts and each part must be taken from different units keeping in view that all units have been addressed in questions properly. Each unit will have maximum 20% (10%+10%) weight. Similarly, each question will carry 20 marks while each part will be of 10 marks only. In both papers, five (5) questions will be set from section-I and three (3) questions from section-II. The candidates will be required to attempt five (5) questions in all, selecting three (3) questions from section-I and two (2) from section-II.
## Syllabus and Detailed Course Readings for B.A. / B. Sc. in the Subject of Economics

### Paper A: Microeconomics & Basic Mathematical Economics

#### Section-I  Microeconomics  (Marks: 60)

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<tr>
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</table>
| 1     | **Introducing Economics:**  
What is Economics; Definition of economics; Branches of Economics; two big microeconomic Questions; What, how and for whom, the economic way of thinking; Why study microeconomics; Microeconomic Objectives; Choices and trade off; Choice and Opportunity cost; Economics as a social science; The nature of economic reasoning; Observations and measurements in Economics; Testing models; Obstacles and pitfalls in economics; Agreements and disagreements; Economics and Policy; Different Economic Systems: Their Characteristics and Examples; What is market? ; Competitive vs. non-competitive markets; Market price; The extent of a market; Real vs. nominal prices. |
| 2     | **Foundations of Microeconomics:**  
Demand and Supply: their concepts and laws; Price and output determination; Elasticity; Relationship of revenue and elasticity; Various types of elasticity; with numerical examples; Measuring the elasticity; Interpretation of elasticity; Factors influence the elasticity of demand and supply; the time dimension: Short-run and Long-run adjustment in the market, Dealing with uncertainty and risk. |
| 3     | **Background to Demand and Supply:**  
Consumer Behavior; Marginal utility theory; Marginal consumer surplus & total consumer surplus; Eqi-marginal principle; Demand under conditions of risk and uncertainty; Indifference curve approaches and analysis; Consumer Equilibrium; The effects of changes in income and prices; The income and Substitution effects of a price change: Normal good, inferior good & giffen good; Short-run and long-run theories of production; Costs in the short-run and long-run; Economies and diseconomies of scale; The optimum combination of factors: The Isoquant/Isoquant approach; Revenue and Profit maximization: Using total, average and marginal curves approaches. |

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Professor Dr Imran Sharif Chaudhry  
Chairman/Convener, Board of Studies,  
Department of Economics,  
Bahauddin Zakariya University, Multan, Pakistan
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<td><strong>4</strong></td>
<td><strong>Behavior of Firms:</strong> Alternative Market Structures: comparison and contrast with some practical examples; Perfect competition: assumptions, short-run and long-run equilibrium of the firm with supply curves; perfect competition and the public interest; Monopoly: assumptions and equilibrium price and output; Short-run and long-run behavior; Monopoly and the public interest; Monopolistic competition: assumptions and equilibrium of the firm; Short-run and long-run behavior; Comparison with perfect competition and monopoly; Oligopoly and its features; Competition and collusion; Equilibrium of the industry under collusive oligopoly; Tacit Collusion: price leadership; Non-collusive oligopoly: Game theory; Non-collusive oligopoly: the kinked demand curve; Price discrimination: types and conditions.</td>
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<tr>
<td><strong>5</strong></td>
<td><strong>Markets, Efficiency and Government Intervention:</strong> Efficiency in economics; Types of efficiency; Efficiency and the production possibility frontier; Competition and efficiency; Efficiency in goods market; Efficiency in product market; general equilibrium; Market failure; Externalities; Negative and positive externalities; Private and social costs; Private and social benefits; Problem created by externalities; Merit goods, de-merit goods and information failures; Public goods; Quasi-public goods; Forms of government intervention: taxes and subsidies; Cost-benefit approach; Framework of cost-benefit analysis.</td>
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<tr>
<td><strong>6</strong></td>
<td><strong>Applied Microeconomics</strong> Economics of the environment: environmental problem, An optimum use of the environment, market failures, policy alternatives; Traffic congestion and urban transport policies: Demand and supply of road space, short-run and long-run, solutions to traffic congestion; Privatization and regulation: arguments for and against.</td>
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**Section-II Basic Mathematical Economics (Marks: 40)**

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<td><strong>7</strong></td>
<td><strong>Introducing Economic Data Skills with Examples:</strong> Economic data sets; Types of economic data: Time-series data, Cross-sectional data, Discrete data, Continuous data; What are economic data handling techniques?: Analysis of main trends and features in economic data; Calculation of percentage change in unemployment and prices; knowledge of fractions, percentages, proportions and rate of change; Working knowledge of index numbers; calculation of averages and its types with interpretations; Economic information in visual form; Skills for Investigation into economic</td>
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problems; Sample Surveys; How to write in a clear and effective way in economic data analysis; Illustration of all topics in this unit with numerical examples.

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<th>8</th>
<th>Economic Models and equilibrium analysis in economics:</th>
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<td>Economic model and mathematical model; Components of a mathematical model with examples: Variables, Constants, Parameters and equations; Relations and Functions with graphs; Types of Functions with examples and graphs; Some examples from Microeconomics and macroeconomics; Equations and Identities; Types of Equations and their solutions; Equilibrium analysis in Economics; Partial Market Equilibrium: Linear and Quadratic models; Equilibrium in National Income.</td>
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<th>9</th>
<th>Derivatives and their use in Economics:</th>
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<td>Concept of Derivative; Rate of Change and Derivative; Derivative and Slope of a curve; Concept of Limit; Inequalities; Limit Theorems; Continuity and Differentiability of a function; Slope VS Elasticity of a function; Rules of Differentiation with numerical examples; Higher Order Derivatives; Differentiation of Implicit Functions; Derivation of marginal functions in Economics; Calculation of Elasticity of Demand and Supply Functions.</td>
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<th>Optimization in Economics:</th>
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<td></td>
<td>Increasing and decreasing Functions with examples; Optimum Values and Extreme Values; Relative Maximum and Minimum Problems; Point of Inflection; First Order and second Order Conditions; Convexity and concavity of Functions with examples; Constrained Optimization; Problems of optimization in Economics: Profit, utility, revenue maximization and cost minimization; Equilibrium of consumer and firm.</td>
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Suggested Readings:


Note: * Books may be considered as text books (i, x &xii)
Paper B: Macroeconomics & Economy of Pakistan

Section-I  Macroeconomics (Marks: 60)

<table>
<thead>
<tr>
<th>Units</th>
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</table>
| 1     | **Foundations of Macroeconomics:** 
Scope of macro economics; Major Macroeconomic Issues: Economic Growth, Unemployment, Inflation, Balance of Payments and Exchange rate; Measuring National Income and output; National Income Aggregates; The circular flow of income; Nominal and Real GDP. |
| 2     | **Classical and Keynesian Macroeconomics:** 
 Says Law; Saving – Investment in Classical Economy; Labor Market; Quantity theory of Money; Keynesian Criticism on classical; Basic determinants of Income determination (Saving, Investment, Consumption); Inflationary and Deflationary gaps and full Employment; Theory of Multiplier; Two Sector Economy; Three Sector Economy; Investment Theory; Marginal Efficiency of Capital; Theory of Accelerator. |
| 3     | **The relationship between money and goods markets:** 
An interpretation of goods and money market; The effects of monetary changes on national income & goods market; IS-LM analysis. |
| 4     | **Aggregate supply and aggregate demand curves:** 
Aggregate supply; Aggregate supply fundamentals; Short run & long run aggregate supply curves; Changes in aggregate supply; Aggregate demand curve; Changes in aggregate demand curve; Short run & long run macroeconomic equilibrium. |
| 5     | **Issues of Inflation, Unemployment and Business Cycle:** 
Inflation and price level; Methods of measuring inflation; Consumer price index; Types and effects of inflation; Remedial measures; Fiscal policy: Its tools and effects; Monetary policy: Its tools and effects; Nature of Unemployment; Causes of Unemployment; Relationship between inflation and unemployment; Business Cycle; Types of Business Cycle; Causes of Business Cycle; Demand Management theories of Business Cycle. |
| 6     | **Macroeconomics and Open Economy:** 
International Trade; Advantages of Trade; Law of Absolute Advantage; Law of Comparative Advantage; Trade restrictions; Balance of Payments and its accounts; Exchange Rate System and its types; Globalization. |
### Section-II  Economy of Pakistan  
(Marks: 40)

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| 7     | **Synopsis of Pakistan’s Economy**  
Characteristics of Pakistan’s economy; Sector-wise Growth and Investment; Agriculture and manufacturing sectors; Fiscal development; Money and credit; Capital Market; Inflation; Trade and payments; Public debit; Education, Health and nutrition; Population, Labor force and Employment; Social safety nets; Transport and communications; Environment;  
(Compare the past data with the latest figures of the above mentioned topics from the latest Pakistan Economic Survey) |
| 8     | **Agriculture and Manufacturing Sectors:**  
Agricultural structure of Pakistan’s economy; Role of women in agriculture sector; Green revolution; Agricultural income tax (arguments in favor and against); Rural finance and rural development; Characteristics of manufacturing sector; Problems of manufacturing sector; Small scale and large scale industries in Pakistan and their contribution to Pakistan’s economy; Suggestions for agriculture and manufacturing sectors. |
| 9     | **Human capital: (Education and health in the economy of Pakistan)**  
The central role of health and education; Education and health as joint investments for development; International trends and convergence in health and education; Improving health and education; Investing in health and education; Child labor; Gender Gap; Educational systems and development; Health systems and development; Policies for health and education; Health sector issues; Education sector issues. |
| 10    | **Energy and Environmental Issues of Pakistan’s economy:**  
The background and current circumstances of the issues; Sources of energy in Pakistan; Issue of circular debit; Latest projects of power generation; Issues of environment in Pakistan; National sustainable development strategy; Green economy and its strategies; State of the environment; Present Government strategies. |
Suggested Readings:

i. “Economics” by John Sloman,* Latest Edition
iii. “Economics” by Lipsey & Chrystal, latest Edition
x. “Pakistan Economic Survey” by Ministry of Finance, Government of Pakistan* (Latest and previous publications)

Note: * Books may be considered as text books (i, ii, ix & x)