1. **THE NATURE and METHOD of ECONOMICS**

By the time you have completed this part of the course you should be familiar with a set of basic terminology and concepts used in Economics and be able to EXPLAIN their use and application. Initially you will have to commit some of the basics to memory, but the key to the ability to explain is to UNDERSTAND. To rely on your memory inevitably leads to disaster in Economics.

1.1 **Explain what Economics is about?**
- Why “all economic questions arise because we want more than we can get” (Parkin et al., 2010: 1)?
- How Economics may be defined as a study of choices?
- The difference between micro and macro economic problems
- Basic economic problems faced by every economy (the ‘big questions’).
- Why scarcity implies choice, which implies a trade-off or opportunity cost?
- Why choices are made at the margin?
- Why are economists interested in marginal benefits and costs and not totals
- How incentives influence choice?
- What is meant by ‘self-interest’ as against the ‘social interest’

1.2 **Explain the ‘Method of Economics’**
- The argument for testing positive rather than normative statements
- What is the process by which economic relationships are discovered?
- The use of models or theories in Economics.
- How models are constructed and tested?
- What the purpose is of assumptions and simplifications?
- The need for and use of the ceteris paribus condition.
- How common errors of reasoning in Economics may arise, such as distinguishing between cause and effect.
- Understand how graphs and diagrams may be used to interpret economic relationships

1.3 **Explain ‘the Economic Problem’**
- How a production possibilities frontier (PPF) may be used to illustrate production efficiency, trade-offs, scarcity and opportunity cost.
- How to use a formula for calculating opportunity cost.
- Explain the law of increasing opportunity cost.
- What is meant by ‘Efficient choice’ in Economics?
- How efficiency may be explained using marginal cost (as an opportunity cost) and marginal benefit (as a measure of willingness to pay)?

The ECONOMY and PRICES

2. **THE MARKET ECONOMY AND PRICE DETERMINATION**

In this part the emphasis relies more and more on the ability to EXPLAIN. You must still commit certain concepts to memory, at least in the early stages, but it is essential to work to the point of
UNDERSTANDING the ideas to enable you to APPLY them to unfamiliar situations. Thus by the end of this section you should be able to explain and apply to novel (new) situations:

2.1 Explain the working of a Market Economy
- How production expanded through specialization and the division of labour.
- How market economies arose and why they were more successful than Centrally Planned Economies in reducing transactions costs by organizing trade through social institutions (firms, markets, property rights and money).
- Why ‘property rights’ are regarded as essential to the efficient operation of a market economy?
- How prices and profits coordinate choices and allocate resources.

2.2 Explain the Demand for Commodities
- Explain how quantity demanded and the amount actually bought may differ
- The law of demand and the reasons for declining consumption as prices rise.
- The demand curve as a maximum willingness and ability to pay curve
- The determinants of demand and the form of a general demand function
- The relationship between consumption and demand determinants.
- Difference between a ‘change in demand’ and a ‘change in quantity demanded’.

2.3 Explain the Supply of Commodities
- The ‘law of supply’ and the reasons why production increases as prices rise.
- The determinants of supply and the general form of a supply function.
- The distinction between a ‘movement along’ and a ‘movement of’ (a change of) the supply curve.

2.4 Explain how Prices are Determined
- The determination of market price and quantity equilibriums.
- How a surplus (excess supply) or shortage (excess demand) arises and is cleared by the market.
- The effect of a change in demand (D) or supply (S) on market equilibrium.
- The effect of simultaneous shifts in D or S.

3. ELASTICITY
Elasticity is dealt with as a section separately from Demand and Supply to emphasise its importance. But elasticity is as fully integral to understanding the determinants of demand and supply and market equilibrium as it is to topics to come, such as the incidence of a tax. It also arises again and again in different guises in later courses! The presentation in lectures presumes that you know how to calculate the slope of a line and a percentage. Since these two ideas are basic to fully understanding elasticities, please seek help if necessary and work at it until you are, before you attempt to master this section.

By the time you have completed the section on Elasticities you should be able to EXPLAIN, CALCULATE and INTERPRET the meaning of simple elasticities.
- Elasticity as a measure of responsiveness and its general definition.
- Why a measure of responsiveness is needed.
- Illustrate how information on responsiveness improves the ability to EXPLAIN and PREDICT.
3.1 **Demand Elasticities**

**Price Elasticity**
- Know and explain how average price elasticity of demand is calculated and the convention regarding its sign.
- Explain under what circumstances an entire demand curve may be described as having a particular elasticity.
- Explain the relationship between elasticity and revenue and ‘the revenue test’.
- When might a price setting firm benefit from lowering (raising) prices?
- Know and explain the determinants of price elasticity of demand.

**Cross Elasticity**
- Explain and calculate cross elasticity of demand.

**Income Elasticity**
- How income elasticity is calculated.
- Explain the determinants of income elasticity.

3.2 **Measuring Elasticities**

- Know why elasticity is measured in percentage terms.
- Know what is meant by ‘arc’ (average) elasticity vs. ‘point’ elasticity.
- Know how the ‘value’ of elasticity is expressed.
- Explain how elasticity varies along a straight line.

3.3 **Supply Elasticity**

- Know how price elasticity of supply is measured.
- Calculate average (arc) supply elasticity.
- Know and explain the determinants of supply elasticity.

4. **EFFICIENCY, MARKETS and GOVERNMENT INTERVENTION**

By the time you complete the study of this section you will have understood that an important issue is the conditions and the extent to which a market can be regarded as ‘economically efficient’ and how particular government interventions in markets affect efficiency. You will recall that in Section 3 the situation was considered where there was no intervention by Government; by the time you have finished this section you should **KNOW** and be able to **EXPLAIN** how government intervention affects market equilibriums.

An important question that the section does not do is to answer the question as to whether an efficient market is also ‘fair’ or ‘equitable’ though arriving at an understanding of ‘fair’ is not as easy as might be imagined and that there is no single understanding of ‘equity’. That study will have to wait until later in your Economics career.

4.1 **Economic Efficiency**

- The distinction between economic efficiency and technical efficiency.
- Explain what is meant by the efficient quantity of a good.
- The principles of decreasing marginal benefit and increasing marginal cost.

4.2 **Market Demand, Supply and Consumer and Producer Surplus**

- The relationship between value, price and willingness to pay.
- Explain the concepts of consumer and producer surplus and how these may be used to determine the efficiency of production.

4.3 **Competitive Markets: efficiency**

- Equilibrium, efficiency and the competitive market.
- Obstacles to efficiency (‘market failure’)
- Dead weight loss of under or over production

4.4 **Explain the impact of Controlled Prices**
- The effect of setting maximum (ceiling) prices and the problems associated with ceiling prices.
- Explain the consequences of setting a minimum (floor) price above and below equilibrium and the reasons why governments typically set floor prices.
- How governments attempt to manage the consequences of floor prices.

4.5 **Taxes and Subsidies**
- The difference between a specific and an *ad valorem* tax.
- Explain the effect on prices and production of the imposition of indirect taxes.
- Explain how the tax burden is distributed between buyers and sellers and how the incidence varies with elasticity.

4.6 **Policy Issues**
- Application of basic principles to selected issues

**MICROECONOMIC THEORY**

**CONSUMERS and PRODUCERS**

In this part of the course the concept of demand and supply are no longer accepted simply on a ‘common sense’ basis, but in each case the theory from which they may be derived is examined. Why should it be necessary to use a theory to come to the same conclusion as before? As was argued in section 1.2 theories or models generally provide additional insight and analysis and allow predictions to be made of problems not previously encountered.

**5. THE HOUSEHOLD AND CONSUMER BEHAVIOUR**

In this section we ‘go behind’ the demand for consumer goods and by the time you have completed it you should KNOW and be able to EXPLAIN:

5.1 **Household Decision making**
- Explain how consumer wants (preferences) and the household budget are basic assumptions of consumer behaviour theory.

5.2 **Marginal Utility Theory of Consumer Behaviour**
- Explain the relationship between total (TU) and marginal utility (MU) and the law of diminishing marginal utility.
- What is meant by the ‘household (consumer) equilibrium condition’ and the equilibrium principle

5.3 **Explain the derivation of the market demand curve**
- Explain how and industry demand curve may be used to derived from individual household demand curves.

5.4 **Explain the paradox of value**
• Explain the ‘paradox of value’ and how it was solved.

6. THE FIRM and ORGANIZING PRODUCTION

In this section, you study a theory of production, which will also permit the derivation of a product supply curve for a competitive firm. Many of the basic concepts applicable here have seen previously in section 6 (consumer theory). Therefore, you will find this section much easier if you master the concepts in section 6 first. Candidates sometimes foolishly think that one or other of these sections can be safely ignored. Beware! The application of marginal principles may sound all too similar when applied to different theories if you have a poor grasp of the subject matter.

By the time you have completed this section you should KNOW and be able to EXPLAIN:

6.1 The Firm and its Economic Problem
• Explain the basic motivating assumption of the theory of the firm.
• Explain the measurement of ‘costs’ and ‘profit’ in Economics.
• Opportunity cost and the distinction between Economic Profits and Accounting Profits.

6.2 Explain the relationship between the Firm and Efficiency
• Distinguish (again) between Technical Efficiency and Economic Efficiency

6.3 Explain the Principal-Agent Problem
• The principal-agent problem and means of addressing the problem

6.4 Explain the relationship between the power of the firm and market structure
• [You should be able to do this once you have completed studying ‘Market Structures’]

7. PRODUCTION and COSTS

7.1 Explain the context of the Firm’s Decision Making horizon
• Explain the distinction between the short and long run decisions of the firm.
• Why sunk costs are ignored in decision-making.

7.2 Explain the concept of a Short Run Production Function
• What is meant by a production function?
• How total (TP), average (AP) and marginal product (MP) are calculated and their inter-relationship.
• The law of diminishing returns and its significance.

7.3 Explain the Link between Production and Short Run Costs
• The distinction between variable and fixed costs.
• The relationship between average (AC), marginal (MC) and average variable costs (AVC).
• Why the ATC is u-shaped
• The effect of changes in fixed and variable input costs on cost functions.

7.4 Explain the link between Long Run Production and Costs
The long run production function
The derivation of a long run average cost curve (LRAC)
The possible shapes of LRAC curves.
Increasing, constant and decreasing returns to scale.
What is meant by an envelope curve?
Minimum Efficient Scale (MES)

**MARKET STRUCTURE, COMPETITION AND COMPETITIVE BEHAVIOUR**

Having completed a study of production and cost, the course now turns to the behaviour of firms in the market, an explanation of which hangs largely on the amount of competition individual firms face. Note that the section follows a slightly different order from that of Parkin et al (2010), hence the indication of the relevant pages introduction
Specifically you should UNDERSTAND and be able to EXPLAIN:

- What is meant by ‘market structures’ ( Chp 8: 207)
- The distinction between competition and competitive behaviour.
- Explain the purpose of ‘measures of concentration’ (Chp 8: 208)
- Explain why firms exist and when ‘markets’ may do a better job of coordinating production.

**8. PERFECT COMPETITION**

By the time you have completed a study of competitive markets you should be able to explain and use the theory of perfect competition to analyse the behaviour (actions) of price-taking firms. (Chap 10)

**8.1 Explain the assumptions of Perfect Competition Theory**
- The assumptions of a perfectly competitive market structure.
- Economic Profits and Normal Profits (again)
- The conditions required for perfect competition to exist
- The perfectly competitive firm’s short run and long run decisions

**8.2 Explain how Revenue and Profits in the SR are determined**
- The demand for the products of the competitive firm.
- The PC firm as a quantity adjustor
- The Economic definition of ‘breakeven’ vs. Accounting ‘breakeven’
- Derivation of the Total Revenue (TR) function
- Deriving average revenue (AR) and marginal revenue (MR) from TR
- The relationship between price, AR and MR in perfect competition.
- Marginal Analysis and profit maximizing rules.
- How to determine the maximum profit output for a firm.
- The firm’s adjustments to SR profits and losses

**8.3 Explain the derivation of The Firm’s SR supply curve**
- How to determine the SR product supply curve of the firm.
- SR equilibrium of a firm and a competitive industry.

**8.4 Explain the derivation of a Market Supply curve**
- How to derive an industry (market) SR supply curve.
8.5 **Explain the conditions of LR Equilibrium**
- Entry and exit of firms from an industry.
- Conditions for LR equilibrium.
- Long run equilibrium of competitive firms in a competitive industry.
- LR shifts in demand and supply

8.6 **Explain the nature of LR Industry Supply**
- Long run industry cost curves.
- Deriving an industry supply curve.
- Internal and external economics of scale.
- Factors causing shifts in LRACs.
- The response by firms to LR industry changes.

8.7 **Explain the conditions of Competitive Industry Efficiency**
- Efficient resource use with MB = MC
- Maximum consumer and producer surplus coincides with competitive industry equilibrium
- Productive and allocative efficiency maximized at competitive equilibrium
- Efficiency in the presence of market failure

9. **MONOPOLY**

By the time you have completed the study of this section you will know the effect that a single producer of a product in the presence of many buyers would have on price and production. However, you will *not* know the effect of one or a few very large firms in the presence of other firms, often and incorrectly called a monopoly, but is an Oligopoly market structure, the study of which is left for Economics 2. We also do not study multiple-price monopolies; for that you will need to read for yourself, or wait for Economics 2.

9.1 **Explain the nature of Short Run Monopoly Equilibrium**
- How a monopoly arises
- Barriers to entry and their effect
- Single price vs. multiple price monopolists
- The single price monopolist’s total (TR), average (AR) and marginal revenue(MR)
- The relationship between the monopolist’s AR and MR.
- The relationship between TR, AR, MR and elasticity.
- The monopoly firm’s cost functions.
- The monopolist’s profit maximizing rules.
- Illustrate diagrammatically the monopolist’s profit maximizing output.
- Why a monopolist has no unique supply curve.
- Why there is no need for a separate theory for the monopoly firm and monopoly industry.

9.2 **Explain the conditions for LR Monopoly Equilibrium**
- The motive for entering, remaining in, or leaving a monopoly industry.
- Differing kinds of entry barriers and their significance.
- Schumpeter’s idea of ‘creative destruction’ (incentives for innovation.
9.3 Compare perfect competition and single-price monopoly
- The effect of a perfectly competitive industry monopolised on price and output
- The allocative efficiency of a monopoly
- The dead weight loss of monopoly
- Rent-seeking

9.4 Explain the case against and for the existence of a Monopoly
- The classic case against monopolies
- The conditions under which monopolies can be beneficial (gains from monopoly)

10. MONOPOLISTIC COMPETITION

Most industries are neither perfectly competitive nor monopoly market structures. By the time you have completed the study of this section you will know the effect that an industry if many producers of a differentiated product in the presence of many buyers would have on price, production and marketing decisions. To achieve this you should KNOW and UNDERSTAND:

10.1 Explain the market structure of a Monopolistic Competition industry
- The difference between a PC and an MC industry
- The implications of a large number of firms for the industry
- The basis for inter-firm competition
- Identifying monopolistically competitive industries

10.2 Explain the MC firm’s price and output
- The firm’s SR price and output decision
- The key difference between a Monopoly firm and an MC firm
- LR equilibrium

10.3 Compare Monopolistic Competition and Perfect Competition
- The two key differences
- Is MC efficient?

10.4 Explain the MC firm’s product quality and marketing decisions
- Maintaining economic profits: seeking our new products
- Maintaining economic profits: creating differentiation perceptions
- Advertising and branding as a signal of quality

CONCLUSION to INTRODUCTORY MICRO-ECONOMICS: bringing it together and highlighting a few unresolved issues

This section in lectures is presented as merely highlights the threads of the lines of argument which the discipline uses to explain and understand economic phenomena, and to point out some of what is missing in a course at an introductory level.
For example, an important issue not tackled in this course is how the extent to which government intervention in the economy helps or hinders in its attempts to produce a socially equitable distribution of welfare and a sustainable long-run use of resources.

By the time you finish you should be less certain of definitive answers to difficult economic questions, but at least be better able to understand how consumers and firms interact in the ‘everyday business of life’ and to read the popular press with greater understanding.