

ITRN 504 Study Guide

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See sample questions at bottom.

Introduction

Current trends in international trade, international production, international finance, and international development

The microeconomics framework

Resource scarcity and resource categories:

natural resources, physical capital, human capital, knowledge capital, and social capital

Types of economic choices societies face:

ownership decision, resource allocation decision, product output and mix decisions, and product distribution decision

Definition of microeconomics

Tools of Analysis

Economic variables, economic models, and functions

Linear equations (slopes, intercepts) and their use in the resource allocation problem

Opportunity cost

Nonlinear graphs

Totals, marginals, averages

Production possibilities frontiers and increasing opportunity costs of production

Supply and Demand Model

Circular flow diagram: households, firms, output markets, input markets

Household demand in output markets:

Quantity demanded and the "law of demand"

Changes in demand vs. changes in quantity demanded

Firm supply in output markets:

Quantity supplied and the "law of supply"

Changes in supply vs. changes in quantity supplied

Market equilibrium

Excess supply and excess demand

Elasticities

Ratio of percentage changes

Price elasticity of demand

Income elasticity of demand

Cross-price elasticity of demand

Price elasticity of supply

Inelastic, unit elastic, elastic

Inferior, normal, and luxury goods

Price ceilings and price floors

The price elasticity of demand and firm revenue

Allocative Efficiency and Taxes

Demand side

willingness to pay, consumer surplus, and demand curve as MB curve

Supply side

willingness to accept, producer surplus, and supply curve as MC curve

Allocative efficiency as a positive aspect of market systems

Analyzing a tax in the supply and demand model- deadweight loss

The Theory of the Firm

Perfect competition

Production function

Total, average, and marginal products of labor

The law of diminishing returns

Economic costs vs. accounting costs

The short run cost curves: TFC, AFC, TVC, MC, AVC, TC, ATC

The relationships among the short run cost curves

Revenue: total revenue and marginal revenue

The Theory of the Firm Continued

Short run:

Short run profit maximization under perfect competition: $MR = MC$ or $P = MC$

MC as short run supply curve

Break-even and shut-down points

Long run:

Returns to scale: constant, increasing, decreasing

Long-run average costs

Long run profit maximization and the entry/exit decision

Two long-run rules: $P = LMC$ and $P = LAC$

Mid-term through here. Study hints:

Make sure you are comfortable drawing all of the diagrams we have gone through so far in the class. Next, change things in these diagrams. For example, what happens in the PPF diagram when there is an improvement in technology? What happens in the supply and demand diagram when input prices increase? What happens to the profit maximizing point in the MC/AVC/ATC diagram when the price increases?

Focus also on definitions. Can you define the elasticities? Can you define the cost concepts? Do you know how to calculate an elasticity?

Limits of the Market System

Imperfect competition- monopoly

MR curve of monopoly

Profit maximization of monopoly

Inefficiency of monopoly

Natural monopoly

Policy responses

Externalities

Definition and types

Inefficiency in presence of externalities

Policy responses- taxes, tradable permits

Public goods

Definitions

excludability and rivalry

private good, pure public good, club good, common property resource

Free-rider problem

Absolute Advantage, Comparative Advantage, and Intra-Industry Trade

Introducing international trade into the supply and demand diagram:

absolute advantage, the resulting pattern of trade, and the gains from trade

Comparative advantage (either import or export in a sector)

Sources of biases in PPFs- differences in technology and resource (factor) endowments

Diagrammatic analysis of movement from autarky to inter-industry trade

Specialization in production and the gains from trade

Intra-industry trade (both import and export in a sector)

Horizontal vs. vertical (fragmentation)

Diagrammatic analysis based on product differentiation

The easier adjustment to increased trade than in the case of *inter*-industry trade

Trade Politics and Policy

Heckscher-Ohlin theory based on factor endowments

The Stolper-Samuelson theorem

North-South trade and wages

Role of specific factors in trade politics

Analysis of a tariff, including the terms-of-trade effect

Analysis of a quota, including difference between domestic-allocated and foreign-allocated quota rights

The WTO and Regional Trade Agreements

Nondiscrimination: most-favored nation (border) and national treatment (behind border)

Agreement on Agriculture

Agreement on Textiles and Clothing

General Agreement on Trade in Services

Agreement on Trade-Related Aspects of Intellectual Property Rights

Dispute Settlement

Preferential/Regional trade agreements (PTAs/RTAs)
Free trade areas and customs unions
Trade creation and trade diversion

Foreign Direct Investment

Definition of FDI

Modes of foreign market entry

Motivations for FDI

Value chains and multinational value networks

Firm-specific assets, firm-level economies, and internalization

Intra-firm trade

Global production networks and fragmentation

OLI Framework

Sample Question for Supply and Demand

Consider a market for a product with a price floor in place. The price floor is at a price of 20, the quantity demanded is 50, and the quantity supplied is 150.

Draw a supply and demand diagram illustrating the above situation, including the excess supply.

Next suppose that the price floor is reduced to 15. Suppose also that $E_p^S = 1.0$ and that $E_p^D = -0.5$. What will be the new level of excess supply? Please show your work.

Hint:

Supply side

$$1.0 = \frac{\frac{\Delta Q}{150}}{\frac{-5}{20}}$$

Demand side

$$-0.5 = \frac{\frac{\Delta Q}{50}}{\frac{-5}{20}}$$

In both cases, solve for ΔQ to get the *change* in quantity on each side of the market. The changes in quantity, along with the original quantities, give you the new quantity.

Sample Question for the Theory of the Firm

This question concerns a profit-maximizing firm operating in the short run in a perfectly-competitive industry.

Use four graphs (ATC, AVC, MC, and MR) to depict the firm in the case of *positive economic profits*. Label the profit rectangle.

Use four graphs (ATC, AVC, MC, and MR) to depict the firm in the case of *profits on operation*. Label the profit-on-operation rectangle.

Please state the *profit maximization rule* that you used in the above two diagrams.

Sample Question on Market Failure

This question concerns a *natural monopoly*.

Please draw a diagram for a natural monopoly consisting of a demand curve, a marginal revenue curve, and an average cost curve.

Please identify the profit-maximizing level of output for the natural monopoly and explain why this is such a level of output.

Please assess this profit-maximizing level of output from a public policy standpoint. Is it where we would like to be? Why or why not?

Please offer suggestions for how a government might modify the above outcome and why it might do so.

Sample Question on Comparative Advantage

Consider two countries, Korea and Malaysia, and two goods, lumber and automobiles. Korea's PPF is biased towards automobiles, and Malaysia's PPF is biased towards lumber.

Draw the PPFs of both countries with lumber on the horizontal axis and illustrate the *autarky equilibria* in both countries given our strong assumption about preferences (e.g. consumption in both countries always lies on the same line from the origin).

If K denotes Korea, M denotes Malaysia, L denotes lumber, and A denotes automobiles, use $\left(\frac{P_L}{P_A}\right)^K$ and $\left(\frac{P_L}{P_A}\right)^M$ to describe the pattern of comparative advantage.

In a *new* pair of PPF diagrams, illustrate the trading equilibrium with $\left(\frac{P_L}{P_A}\right)^W$. For both countries, illustrate the production point (B), the consumption point (C), the quantity of imports, and the quantity of exports.