

MBAD6112 – Exam 1 study guide

Chapter 1

There is not much in chapter 1 to worry about – everything is covered in other chapters.

Chapter 2

There are two main points in chapter 2.

1. Profit maximization rule of $MR=MC$ (and that we can “derive” that simply by maximizing the firm’s profit function, which is $\text{Profit}=TR-TC$).
2. The constrained optimization. You should know how to do a problem of this type (that will be a recurring theme of the study guide).

Chapter 3

This chapter is about supply and demand. The key points are:

1. Know how various factors affect supply and demand.
2. Be able to determine equilibrium price and quantity using supply and demand functions.

Chapter 4

This chapter is about the consumer’s choice problem.

1. Understand indifference curve analysis. This means the assumptions and the properties of indifference curves.
2. Understand the concepts of utility and marginal utility, and that indifference curves can be derived from a consumer’s utility function.
3. Understand how to construct a budget constraint and how various factors (changes in income, changes in prices) affect the budget constraint.
4. Be able to solve a consumer’s optimization problem.
5. Understand the meaning of the various types of elasticities (own-price elasticity of demand, income elasticity, cross-price elasticity). For example, what does a positive cross-price elasticity mean?
6. Be able to calculate elasticities.

Chapter 5

This chapter is about regression analysis. Keep in mind that you will **not** be estimating any regression models for the exam – the final project will test your ability in that area.

1. Understand how to interpret regression coefficients, paying specific attention to the form of the estimated regression equation (is it a standard linear regression, such as: $\text{wage}=\text{constant}+\text{age}$; is it a model like: $\ln(\text{wage})=\text{constant}+\ln(\text{age})$ – recall that the interpretation of the coefficients is different for each of those models).

2. Understand how to interpret estimated coefficients for dummy variables – recall that they are compared to whatever the excluded dummy variable is for that group of dummy variables.
3. Be able to conduct statistical tests on the individual regression coefficients.
4. Know how to determine how well the model fits the data (R^2 , adjusted R^2 , F-tests).
5. Be able to conduct statistical tests to determine if the regression is significant or a subset of regressors is significant.

Chapter 7

This chapter is about firms and production.

1. Know the differences between short run and long run production.
2. Understand the law of diminishing marginal returns.
3. Understand isoquant analysis (keep in mind this analysis is very similar to indifference curve analysis).
4. Understand what is meant by “returns to scale.”

Chapter 8

This chapter is about cost analysis.

1. Know the short-run cost definitions.
2. Understand why the short-run costs have the shape that they do.
3. Understand isoquant and isocost analysis (keep in mind this analysis is very similar to the analysis with indifference curves and budget constraints).
4. Be able to solve a cost minimization problem.
5. Understand the difference between short-run and long-run costs, and know why the long-run cost functions have the shape that they do.

General overview: Keep in mind that many of these problems have very similar solution techniques. It is unlikely that everything on the guide will be on the exam, but some things keep reappearing (knowing how to solve an optimization problem). I would say that chapter 5 is probably the most unique of all the chapters but it is a really important chapter because it links data with theory.