

# **MBA 5200 Placement Test for Incoming Fall 2013 MBA Students**

## **Suggested Study Guide**

### **GENERAL INFORMATION – ECONOMICS PLACEMENT EXAM**

Students must demonstrate, at a minimum, a B-grade level (strong but not necessarily outstanding) understanding of economic principles.

The relevant topics are those found in all standard principles of economics text books and college level principles of microeconomics and principles of macroeconomics courses. Students should understand all of the topics listed below, but since the placement test will not be long enough to test all of the topics, test questions will examine students' understanding of topics randomly selected from the list.

### **PRINCIPLES OF MICROECONOMICS**

1. Understand how economics is a social science that draws conclusions based on hypotheses, theories, and data in order to understand human behavior
2. Basic microeconomics terms and concepts, including scarcity and choice, equilibrium, efficiency and equity, positive and normative economics, comparative advantage, and specialization
3. Understand the fundamental economic question of allocating scarce resources.
4. The concepts of opportunity cost and the production possibility frontier
5. Supply and demand, the function of prices in markets, and how markets work and sometimes don't work (for example market failure and externalities).
6. The effects of government intervention in markets.
7. Comprehend how consumers make choices
8. Production theory
9. The costs of production
10. Firm behavior and market outcomes in competitive markets
11. Firm behavior and market outcomes in imperfect markets (monopoly, oligopoly, and monopolistic competition)
12. Elasticity
13. Comprehend how the markets for resources operate and the determination of wage rates, interest, and rent
14. Understand the determination of income distribution, including poverty and discrimination
15. Comprehend the determinants of international trade flows
16. Apply economic reasoning to better understand and critically evaluate real world circumstances and events

### **PRINCIPLES OF MACROECONOMICS**

1. Basic macroeconomic terminology and concepts, including the distinction between real and nominal magnitudes

2. National income accounts
3. The nature of the business cycle
4. Comprehend the determinates of important macroeconomic variables, including the level of income, the level of employment, the unemployment rate, the natural rate of unemployment, the price level, the inflation rate, productivity and the rate of interest
5. Supply and demand for money
6. The Federal Reserve System
7. Comprehend the development of, and be able to apply aggregate demand and aggregate supply
8. The effects of fiscal and monetary policies
9. The basics of theories of macroeconomic instability
10. Comprehend unemployment and inflation tradeoffs
11. The effects of the federal government's budget deficit
12. Comprehend the concept of long run growth and policies to affect growth
13. Comprehend comparative advantage
14. The determinants of foreign trade flows and exchange rates, and their effects on the domestic economy

## **MBA 5300 Placement Test for Incoming Fall 2013 MBA Students Suggested Study Guide**

Test Format: 30 multiple choice questions; 60 minutes; no formula sheet.

Required Calculator: A financial calculator is required for the placement test. If you do not currently own or have access to one, please consider purchasing the Texas Instruments BA II Plus or Professional given that it is the required calculator for MBA finance courses.

Recommended Text: If you wish to review material for this placement test, we recommend that you use Financial Management: Theory and Practice by Brigham & Erhardt [ISBN: 978-1-111-97220-2]. If you are interested in purchasing a book for review, we recommend you purchase this one given that it will be a required text in your MBA finance courses.

### Financial Statements [Chapter 2]

- Be able to create and interpret Income Statement, Balance Sheet and Statement of Retained Earnings; Understand what items represent sources or uses of funds.

### Time Value of Money [Chapter 4]

- Find Present Value and Future values of both single sums and annuities; Find Present Value of perpetuities; Create Loan amortization; Find Rate of return.

### Bond Valuation [Chapter 5]

- Find bond price; Find bond yield to maturity; Find bond yield to call; Calculate current yield.

### Risk and Return [Chapter 6]

- Calculate the required rate of return of a stock using the Capital Asset Pricing Model; Understand the relationship between risk and return.

### Stock Valuation [Chapter 7]

- Find the value of a share of stock using the constant growth formula

### Cost of Capital [Chapter 9]

- Calculate the weighted average cost of capital; Understand the use of the weighted average cost of capital.

### Capital Budgeting [Chapters 10]

- Calculate NPV, IRR, MIRR, Payback Period, and Discounted Payback Period for given cash flows; Understand the implied decision using these decision rules.

## **MBA 5800 Placement Test for Incoming Fall MBA Students Suggested Studying Guide.**

1. Descriptive Data: Graphical
  - a. Classification of Variables, Graphs to Describe Variables, Time-Series Data, Numerical Variables, Data Presentation Errors.
2. Descriptive Data: Numerical
  - a. Measures of Central Tendency and Location Measures of Variability Weighted Mean and Measures of Relationships Between Variables
3. Probability
  - a. Random experiment outcomes and events. Probability and its Postulates Probability Rules Bivariate Probabilities Baye's Theorem.
4. Discrete Random Variables and Probability Distributions
  - a. Random Variables, Probability Distributions for Discrete Random Variables, Properties of Discrete Random Variables, Binomial Distribution, Poisson distribution, Hypergeometric Distribution, Jointly distributed Discrete Random Variables.
5. Continuous Random Variables and Probability Distributions
  - a. Continuous Random Variables, Expectations for Continuous Random Variables, The normal Distribution, The exponential Distribution, Jointly distributed Continuous Random Variables.
6. Sampling and Sampling Distributions
  - a. Sampling from populations, Sampling Distribution of Sample Means, Sampling Distributions of Sample Proportions, and Sampling Distributions of Sample Variances.
7. Estimation Single Populations
  - a. Properties of Point Estimators, Confidence Interval Estimation for the Mean of a Normal Distribution, Confidence Interval Estimation for the Mean of a Normal Distribution, Confidence Interval Estimation for Population Proportions, Confidence Interval Estimation for the Variance of a Normal Distribution, Confidence Interval Estimation: Finite Populations, Sample Size Determination: Large Populations, Sample Size Determination: Finite Populations.
8. Estimation: Additional Topics
  - a. Confidence Interval Estimation of the Difference Between Two Normal Population Means: Depend Samples, and Independent Samples. Between Two Populations Proportions: Large.
9. Hypothesis Testing: Single Population
  - a. Concepts of Hypothesis Testing, Tests of the Mean of a Normal Distribution: Population Variance Known and Unknown for Large Samples, Assessing the Power of a Test, Tests of the Variance of Normal Distribution.
10. Hypothesis Testing: Additional Steps
  - a. Tests of the Difference Between Two Normal Population Means: Dependent and Independent Samples, Large Samples, Normal Distributed Populations.
11. Simple Regression
  - a. Overview of Linear Models, Linear Regression Model, Least Squares Coefficient Estimators, Explanatory Power of a Linear Regression Equation, Statistical Inference:

Hypothesis Tests and Confidence Intervals, Prediction, Correlation Analysis, Beta Measure of Financial Risk, Graphical Analysis.

12. Multiple Regression

- a. The Multiple Regression Model, Estimation of Coefficients, Explanatory Power of a Multiple Regression Equation, Confidence Intervals and Hypothesis Testing for Individual Regression Coefficients, Tests on Regression Coefficients, Prediction, Transformation for Nonlinear Regression Models, Dummy Variables for Regression Models, Multiple Regression Analysis Application Procedure.

13. Additional Topics in Regression Analysis

- a. Model Building Methodology, Dummy Variables and Experimental Design, Lagged Values of the Dependent Variable Regressors, Specification Bias, Multicollinearity, Heteroscedasticity, Autocorrelated Errors.

14. Analysis of Categorical Data (Suggested, but not on test)

- a. Goodness of Fit Tests: Specific Probabilities, Population Parameters Unknown, Contingency Tables, Non Parametric Tests for Paired or Matched Samples, Nonparametric Tests for Independent Random Samples, Spearman Rank Correlation, A Non parametric Test for Randomness.