TOPICS COVERED IN
THE EXECUTIVE PROGRAMS ADMISSIONS TEST

1. ACCOUNTING

Fundamentals

1. Recognize a balance sheet
2. Recognize an income statement
3. Recognize a cash flow statement
4. Recognize three required statements
5. Know which of the required statements describe time periods instead of points in time
6. Identify the assets portion of a balance sheet
7. Identify the liabilities portion of a balance sheet
8. Identify the equity portion of a balance sheet
9. Define asset
10. Define liability
11. Define equity in the context of a balance sheet
12. Apply the $assets = liabilities + equity$ relation
13. Define paid-in capital in the context of a balance sheet
14. Define retained earnings in the context of a balance sheet
15. Understand that equity has a residual claim on assets
16. Distinguish which facts would be presented in financial statements
17. Distinguish between current and noncurrent assets
18. Distinguish between current and noncurrent liabilities
19. Explain the difference between equity and cash position
20. Define accounts receivable
21. Define inventory
22. Identify the components of equity that can be negative
23. Recognize common synonyms for net income
24. Define fiscal year
25. Recognize the three sections of a Cash Flow Statement

Liabilities and Equity

1. Calculate market capitalization
2. Understand effect of price per share on the balance sheet
3. Identify the financial statements that are affected by issuing dividends
4. Given a balance sheet, calculate working capital
5. Given a balance sheet, calculate debt capital
6. Demonstrate an understanding of the components of paid-in capital for a corporation
7. Distinguish between value of equity account and market capitalization
8. Describe highly leveraged in terms of debt as a fraction of equity capital
9. Distinguish between debt capital and equity capital
2. FINANCE

Risk and Return:

1. Calculate rate of return (1 period)
2. Define average rate of return
3. Describe how risk determines required return
4. Distinguish between expected and realized return
5. Define opportunity cost of capital
6. Describe arbitrage
7. Define market efficiency
8. Define Law of One Price
9. Define liquidity
10. Define financial intermediation
11. Define a bond
12. Zero coupon vs. level coupon bonds
13. Calculate the value of a bond
14. Explain the risk-free rate
15. Explain the effect of market interest rates on the value of a bond
16. Distinguish between government and corporate bonds
17. Define stock
18. Dividends vs. capital appreciation
19. Common vs. preferred shares
20. Public vs. private corporations
21. Define mutual funds
22. Explain the diversification effect
23. Systematic vs. diversifiable risk
24. Compare long-term risk for stocks vs. bonds
25. Relationship between risk and return for a stock

Time Value:

1. Calculate compounded interest
2. Determine required principal from interest and future value
3. Convert future value to present value
4. Compare daily and yearly compounding
5. Calculate the net present value of a cash flow
6. Calculate the internal rate of return of a cash flow
7. Evaluate a project based on net present value or internal rate of return
8. Define perpetuity
9. Calculate the present value of a perpetuity
10. Calculate the present value of a growing perpetuity
11. Calculate the rate of return of a perpetuity
12. Define annuity
13. Calculate the present value of an annuity
3. STATISTICS

Probability

1. Calculate the probability of an event
2. Use the relation \( \Pr(\text{not } A) = 1 - \Pr(A) \)
3. Recognize when events are mutually exclusive
4. Apply \( \Pr(A \text{ or } B) = \Pr(A) + \Pr(B) \) for mutually exclusive events
5. Apply \( \Pr(A \text{ or } B) = \Pr(A) + \Pr(B) - \Pr(A \text{ & } B) \)
6. Recognize when events are independent
7. Apply \( \Pr(A \text{ and } B) = \Pr(A)\Pr(B) \) for independent events
8. Interpret the \( \Pr(A|B) \) notation
9. Apply \( \Pr(A|B) = \Pr(A) \) for independent events
10. Calculate \( \Pr(A|B) \) if A and B are not independent

Descriptive

1. Calculate the mean (discrete trials)
2. Calculate the median (discrete trials)
3. Calculate the mode (discrete trials)
4. Calculate the variance (discrete trials)
5. Calculate the standard deviation (discrete trials sample)
6. Calculate the standard deviation (population)
7. Calculate a weighted average
8. Define the term 'expected value'
9. Read a histogram with absolute frequencies
10. Read a histogram with relative frequencies
11. Estimate a percentile statistic from a histogram
12. Distinguish between a sample and a population
13. Explain what sample bias is

Distributions

1. Distinguish a discrete and a continuous distribution
2. Distinguish a p.m.f. and a p.d.f.
3. Calculate the probability from a p.m.f.
5. Recognize the effect on a distribution plot of changing the mean
6. Recognize the effect on a distribution plot of changing the std. deviation
7. Distinguish median and mean on a distribution plot
8. Identify a plot of a Normal distribution
9. Calculate probability that a normal random variable is in certain range
10. Define z-value
11. Recognize probabilities corresponding to z-values 1, 2, 3
12. Recognize z-values corresponding to probabilities 90%, 95%, 99%