## Midterm exam critical analysis

## ASSIGN BUSTER

NAME: $\qquad$ BSAD 180: ManagerialFinanceMidterm

Exam I. Multiple Choices (40\%) (b)1. The primary goal of financial management is to: a. maximize current dividends per share of the existing stock. b. maximize the current value per share of the existing stock. c. avoid financial distress. d. minimize operational costs and maximize firm efficiency. e. maintain steady growth in both sales and net earnings. (c) 2. The interest rate expressed as if it were compounded once per year is called the $\qquad$ rate. a. stated interest b. ompound interest c. effective annual d. periodic interest e. daily interest ( b )3. You are comparing two investment options. The cost to invest in either option is the same today. Both options will provide you with $\$ 20$, 000 of income. Option A pays five annual payments starting with $\$ 8$, 000 the first year followed by four annual payments of $\$ 3$, 000 each. Option B pays five annual payments of $\$ 4,000$ each. Which one of the following statements is correct given these two investment options? a. Both options are of equal value given that they both provide $\$ 20,000$ of income. . Option A is the better choice of the two given any positive rate of return. c. Option B has a higher present value than option A given a positive rate of return. d. Option B has a lower future value at year 5 than option $A$ given a zero rate of return. e. Option A is preferable because it is an annuity due. (d )4. Your parents are giving you $\$ 100$ a month for four years while you are in college. At a 6\% discount rate, what are these payments worth to you when you first start college? a. \$3, 797. 40 b. \$4, 167. 09 c. \$4, 198. 79 d. $\$ 4,258.03$ e. $4,279.32$ ( c )5. The time value ofmoneyconcept can be defined as: a. the relationship between the supply and demand of money. b. the relationship between money spent versus money received. c. the relationship between a dollar to be received in the future and a dollar today.
d. the relationship of interest rate stated and amount paid. e. None of the above. (b)6. Marko, Inc. is considering the purchase of ABC Co. Marko believes that ABC Co. can generate cash flows of $\$ 5,000, \$ 9,000$, and $\$ 15$, 000 over the next three years, respectively.

After that time, Marko feels ABC will be worthless. Marko has determined that a $14 \%$ rate of return is applicable to this potential purchase. What is Marko willing to pay today to buy ABC Co.? a. $\$ 19,201.76$ b. $\$ 21,435.74 \mathrm{c}$. $\$ 23,457.96$ d. $\$ 27,808.17$ e. $\$ 31,758.00$ (b)7. What is the effective annual rate if a bank charges you 7. 64\% compounded quarterly? a. 7. 79\% b. $7.86 \%$ c. $7.95 \%$ d. $7.98 \%$ e. $8.01 \%$ ( a)8. A General Co. bond has an $8 \%$ coupon and pays interest annually. The face value is $\$ 1,000$ and the current market price is $\$ 1,020$. 0 . The bond matures in 20 years. What is the yield to maturity? a. $7.79 \%$ b. $7.82 \%$ c. $8.00 \%$ d. $8.04 \%$ e. $8.12 \%$ ( a) 9. Wine and Roses, Inc. offers a $7 \%$ coupon bond with semiannual payments and a yield to maturity of $7.73 \%$. The bonds mature in 9 years. What is the market price of a $\$ 1,000$ face value bond? a. $\$ 953.28$ b. $\$ 963.88$ c. $\$ 1,108.16 \mathrm{~d}$. $\$ 1,401.26$ e. \$1, 401. 86 ( a)10. What is the net present value of a project that has an initial cash outflow of $\$ 12,670$ and the following cash inflows? The required return is $11.5 \%$.

YearCash Inflows 1 \$4, 3752 \$ 03 \$8, 7504 \$4, 100 a. \$218. 68 b. \$370. 16 c. \$768. 20 d. \$1, 249. 65 e. \$1, 371. 02 II. Essays/Calculations (60\%) 1. You are planning to save for retirement over the next 30 years. To do this, you will invest $\$ 1,000$ a month in a stock mutual fund account. The return of the account is expected to be $1 \%$ per month. When you retire, you will put your money into a safer account that will earn $0.5 \%$ per month. How much can
you withdraw each month from your account assuming a 25-year withdrawal period? 2.

Miller Corp. has a premium bond making semiannual payments. The bond pays an $8 \%$ coupon, has a YTM of $6 \%$, and has 10 years to maturity. The Modigliani Corp. has a discount bond making annual payments. The bond pays a $6 \%$ coupon, has a YTM of $8 \%$, and also has 10 years to maturity. If interest rates remain unchanged, what do you expect the price of these bonds to be 1 year from now? In 5 years? In 10 years? Please also illustrate your answers by graphing bond prices versus time to maturity. 3. Define the following terms: (a) Pure discount loan. b) YTM. (c) Call bond. 4. You are ready to buy a house and you have $\$ 20,000$ for a down payment and closing costs. Closing costs are estimated to be $\$ 5,000$. The interest rate on the Ioan is $5.5 \%$ per year with monthly compounding for a 30-year fixed rate Ioan. You are able to buy the house at $\$ 165,000$. What is the monthly payment? Suppose that you have an annual salary of $\$ 50,000$. What is the ratio of the mortgage payment to your monthly income? 5. You receive a credit card application from Muwa Bank offering an introductory rate of 1. 9\% per year, compounded monthly for the first 6 months, increasing thereafter to 22. 99\% compounded monthly. Assuming that you transfer the \$5, 000 balance from your existing credit card and make no subsequent payment, how much interest will you owe at the end of the first year? 6. The Brennan Co. just paid a dividend of $\$ 1$ per share on its stock. The dividends are expected to grow at 8\% for two years. After that, the growth rate will equal $6 \%$ per year indefinitely. The cost of equity is $12 \%$. The YTM on $30-$ year T-bond is $10 \%$. What is the fair price of the shares today?

