BUS-123 Spring 2020 Instr: F. Paiano Exam #4 - *Show Your Work* Valuation & Yield Calculations Name: _____ Chapter 10, Review 6

1) An 8%, 15-year bond has a par value of \$1,000 and a call price of \$1,080. It is callable in 5 years. The bond is currently selling for \$1,150. Calculate its current yield, yield-to-maturity, and yield-to-call. (4 pts – Do your best!)

2) A married couple from California is in the 35% Federal tax bracket and the 10% California tax bracket. They are considering a 4³/₄% Nevada municipal bond (Federal tax-free), a 4¹/₄% California bond (double tax-free) and a 7¹/₂% corporate bond (fully-taxable). Calculate the taxable equivalent yield of each bond. Which is the best buy? (4 pts - Show all your work!)

(Note: For the double tax-free bond, you may use the easy formula or the more complicated but more accurate formula.)

Using annual compounding, calculate the valuations for the following bonds: (4 pts - Use the chapter 10 tables!)
a) 10%, 20-year bond priced to yield 6%
b) 4%, 10-year bond priced to yield 7%

4) Colgate-Palmolive (CL) is currently selling for approximately \$71. Their dividend is currently \$1.76 and they have been growing their dividend at a constant rate of 4%. If our required rate of return is 8%, using the constant perpetual growth model, what would we believe CL is worth? Is CL a potentially good investment? Would you buy CL? (Optional: What if we changed our required rate return to 6%?) (3 pts – Don't Give Up!)

5) Assume it is January 1, 2020. Merck Pharmaceuticals (MRK) is currently selling for \$80. Dividends for 2020 are expected to be \$2.44 per share. We expect that dividends in 2021 will be \$2.54 and in 2022 they will be \$2.64. We will be selling the stock at the end of 2022 and we expect the price to be \$95 per share at that time. Our required rate of return is 10%. Using the Discounted Cash Flow Model stock valuation formula (Value of stock = present value of future dividends + present value of price of stock when we plan to sell), calculate the present value of the future cash flows from this stock. Would you consider buying MRK? (3 pts – Never Give Up!)