

3 of 5

NAME: \_\_\_\_\_

(b)(6)

DR. COLLINS

TEST #3C (ON-LINE SECTION ONLY)

TIME LIMIT: 75 MINUTES

TEST TIME WINDOW: WEDNESDAY, JUNE 28, 2017 (8:00AM) TO FRIDAY  
JUNE 30, 2017 (5:00PM)

(OPEN BOOK, ONE PAGE OF NOTES - 8 1/2 X 11)

Attach Notes Page to back of Test when submitted for grade

ABSOLUTELY NO CELL PHONES OR BACKPACKS IN TESTING AREA!!!

Multiple Choice Questions: For each Multiple Choice question below select the most nearest answer from choices A - D. Properly write your selected answer in the blank beside the corresponding question. Each M/C question is worth 10 points each.

- (10) A 1. A \$10,000 face value bond pays dividends of \$1,200 (12%/yr bond rate) at the end of each year. If the bond matures at 20 years, what is the approximate bond value at an interest rate of 11% per year, compounded annually?
- $$P = 1200(P|A, 11\%, 20) + F(P|F, 11\%, 20)$$

$$(7.96333) \quad (0.12403)$$
- A. \$ 8,245  
 B. \$ 9,300  
 C. \$10,800  
 D. \$12,820
- $V = 10,000$   
 $r = 12\%$   
 $A = 1200$   
 $n = 20$

- (10) D 2. Douglas wishes to purchase a \$1,000 bond from Jose who needs the money. There are 7 years remaining until the bond matures, and interest payments are made quarterly. Douglas decides to offer Jose \$850 for the bond because he wants to earn exactly 8% per year compounded quarterly on the investment. What is the "effective" annual bond rate of interest?
- $$P = Vr(P|A, i\%, n) + F(P|F, i\%, n)$$

$$i_{eff} = \left(1 + \frac{r}{m}\right)^m - 1$$
- A. 9.10%  
 B. 5.28%  
 C. 6.60%  
 D. 1.30%

$$\begin{aligned}
 V &= 1,000 \\
 P &= 850 \\
 n &= 28 \\
 i &= 2\%
 \end{aligned}$$

$$850 = 1000(r)(P|A, 2\%, 28) + 1000(P|F, 2\%, 28)$$

$$(21.28127) \quad (0.57437)$$

$$r = 0.012952$$

$$i_{eff} = \left(1 + \frac{0.012952}{4}\right)^4 - 1 = 0.013015$$