Unit 13 - Week 10: Bond Portfolio Management

Assignment 10

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-11-25, 23:59 IST.

1) If the horizon $H = T - t = 1.7$ years and the annual rate of interest is 5%, with the bond price at time t being $B(t) = 98$, then $B(T)$ equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 106,107

1 point

2) If the value of a zero-coupon bond at time $T = 2$ is 100 and the risk-free annual spot rate is 8%, then the price of the bond at time $t = 0$ equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 85.5,86.0

1 point

3) Consider a coupon bond with a nominal of 100 and annual coupons of 8, with the maturity of the bond being 10 years. If the annual compounding rate of interest is 6%, then the duration D of the bond equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 7.4,7.5

1 point

4) The value of the Modified Duration for the bond in Question Number 3, equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 7.00,7.04

1 point

5) If we invest the $\frac{2}{3}rd$ of the total amount in a zero-coupon bond of maturity 2 years and the remaining $\frac{1}{3}rd$ of the total amount in a zero-coupon bond of maturity 3 years, then the Duration of the resulting portfolio of the two bonds equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 2.3,2.4

1 point

6) The value of the Convexity for the bond in Question Number 3, equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 65.0,65.3

1 point

7) The absolute value of the difference between the estimate of $\frac{\Delta B}{B}$ using only Duration and the estimate of $\frac{\Delta B}{B}$ using both Duration and Convexity, for the bond in Question Number 3, when the interest rate increases by 1%, equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 0.002,0.004

1 point

8) We create a bond portfolio of two zero-coupon bonds, with the maturities of 2 and 4 years, respectively, so that the resulting bond portfolio has a Duration of 3. If w_1 and w_2 are the respective weights of the two zero coupon bonds in the portfolio, then the value of $\frac{w_1}{w_2}$ equals :

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 1

1 point