Assignment 10

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

Due on 2020-11-26, 23:59 IST.

If the horizon \( H = T - t \) is 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 100, 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 95.2, 96.0)

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 9.5, 9.6)

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 7.3, 7.5)

1 point

5. If we invest the \( \frac{2}{3} \) of the total amount in a zero-coupon bond of maturity 2 years and the remaining \( \frac{1}{3} \) 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 1.9, 2.0)

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 21.2, 22.4)

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