

# Unit 11 - Week 9

**Course outline**

How does an NPTEL online course work?

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## Assignment 9

The due date for submitting this assignment has passed. **Due on 2020-04-01, 23:59 IST.**  
 As per our records you have not submitted this assignment.

- 1) The inverse relationship between the bond's price and rate of return is represented by a negatively sloped curve known as the yield curve
  - a. True
  - b. False

a  
 b

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 2) Senior bonds are backed by the promise of the issuer to pay interest and principal on a timely basis.
  - a. True
  - b. False

a  
 b

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 3) An increase in yield from 7.8% to 7.82% would represent an increase of \_\_\_\_\_ basis point
  - a. 0.2
  - b. 2
  - c. 20
  - d. 200

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 4) The bid price is the price the dealer is willing to sell the bond.
  - a. True
  - b. False

a  
 b

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 5) Which of the following bonds will have the longest duration?
  - a. 20-year maturity and a 12% coupon.
  - b. 20-year maturity and an 8% coupon.
  - c. 15-year maturity and a 12% coupon.
  - d. 10-year maturity and a 15% coupon.

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 6) A bond with a Face Value of \$10,000 and quoted at 97-4/32 would be selling at:
  - a. \$10,000
  - b. \$9687.5
  - c. \$9712.5
  - d. \$971.25

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: c
- 7) Joy purchased a bond with a specified interest rate of 17%. He has invested \$100,000. Assuming that the bond is compounded annually, which of the following statement(s) is true?
  - a. The real interest rate is 17%
  - b. The effective interest rate will be more than 17%
  - c. Both effective interest rate and nominal interest rate will be 17%
  - d. None of the above

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: c
- 8) Calculate the Effective Annual Rate of a bond with 12% interest compounded monthly
  - a. 12.0755%
  - b. 12.1798%
  - c. 12.6825%
  - d. 13.1834%

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: c
- 9) The value of a \$1000 face value bond with a 8.5% coupon rate when the required rate of return is 12.3% is
  - a. Greater than its Face Value
  - b. Lesser than its Face Value
  - c. Equal to \$1000
  - d. Not enough information is available to conclude

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 10) Ceteris Paribus, the price of a discounted bond can decrease as it moves towards maturity
  - a. True
  - b. False

a  
 b

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 11) Most of the PSU Bonds are transferable and endorsed at delivery and are issued in the form of \_\_\_\_\_ Promissory Note
  - a. Demand
  - b. Usance
  - c. Inland
  - d. Foreign

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 12) The Macaulay's duration of a 4-year, 9% annual coupon bond with bond's yield to maturity at 12% per 1000 of par value is \_\_\_\_\_ years [Approximate to three decimal places]
  - a. 2.359
  - b. 3.050
  - c. 3.504
  - d. 3.815

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: c
- 13) The modified duration of a 3-year, 6% annual coupon bond with bond's yield to maturity at 9% per 1000 of par value is \_\_\_\_\_ years [Approximate to three decimal places]
  - a. 2.828
  - b. 2.594
  - c. 2.767
  - d. 2.832

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 14) Convexity is a measure of the change in the slope of the yield curve.
  - a. True
  - b. False

a  
 b

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 15) The simple annualised yield to call of a 10-year, 9% coupon bond, (par value INR 1000) first callable in 8 years at a call price of INR 1100, paying interest semiannually and trading at INR 940 is closest to \_\_\_\_\_%:  
 [Use ARTM formula]
  - a. 5.592
  - b. 9.804
  - c. 10.784
  - d. 16.911

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: c
- 16) A 10 year maturity bond has an annual coupon rate of 9%. The bond price closed at 106% of par value currently. Assuming that the par value of the bond is \$ 1,000, the annual current yield of the bond is \_\_\_\_
  - a. 8.15%
  - b. 8.16%
  - c. 9.00%
  - d. 8.49%

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: d
- 17) A coupon bond pays annual interest of 15%, matures in 12 years and has a yield to maturity of 12%. Considering the par value is \$1000, the current yield on the bond is closest to:
  - a. 14.33%
  - b. 13.13%
  - c. 12.66%
  - d. 11.48%

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: c
- 18) Which of the following is true about convexity of a bond?
  - a. As the yield increases, convexity of the bond decreases.
  - b. For a given yield and maturity, the lower the coupon, the greater the convexity.
  - c. For a given yield and modified duration, the lower the coupon, the greater the convexity.
  - d. All of the above

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: d
- 19) A zero coupon bond matures in 7 years. At a market discount rate of 3% per year and assuming annual compounding, the price of the bond per 100 of par value is closest to:
  - a. 80.684
  - b. 81.309
  - c. 92.834
  - d. 103.00

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: b
- 20) The value of a 7 year 9% bond with a discount rate of 8% when compounded continuously is the closest to (assume par value= \$1000)
  - a. 2629.41
  - b. 2556.40
  - c. 1034.56
  - d. 968.267

a  
 b  
 c  
 d

No, the answer is incorrect.  
 Score: 0  
 Accepted Answers: c