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Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

POST GRADUATE DIPLOMA IN MANAGEMENT (2019-21) END TERM EXAMINATION (TERM -VI)

Subject Name: Fixed Income Security	Time: 02.30 hrs
Sub. Code- PGF-09	Max Marks: 60

Note:

All questions are compulsory. Section A carries 10 marks:5 questions of 2 marks each,Section B carries 30 marks having 3 questions (with internal choice question in each) of 10 marks each and Section C carries 20 marks one Case Study having 2 questions of 10 marks each.

SECTION - A

Attempt all questions. All questions are compulsory.

 $2 \times 5 = 10$ Marks

- **Q.1** (A): How Fixed Income market is different from Equity market? Explain.
- **Q.1 (B):** What will be the relationship among coupon rate, current yield and yield to maturity for a bond selling at premium from par?
- **Q.1** (C): How Coupon rate bonds are different from Zero Coupon Bond?
- Q.1 (D): How Inflation indexed bond help customers to protect from inflation risk?
- **Q.1 (E):** Consider a bond paying a coupon rate of 8% per year semiannually when the market interest rate is only 4% per annum. The bond has four years until maturity. Find today's bond price.

SECTION - B

All questions are compulsory (Each question has an internal choice. Attempt any one (either A or B) from the internal choice) $10 \times 3 = 30$ Marks

Q. 2: (A). Suppose that the yield to maturity of the 4% coupon, 10 years maturity bond falls to 7% from 8% by the end of the first year and that the investor sells the bond after the first year. If the investor's federal state tax rate on interest income is 30% and the tax rate on capital gain is 20%, what is the investor's after tax rate of return?

Or

Q. 2: (B). How credit risk affects Bond prices?

Q. 3: (A). Discuss the theories related to Term Structure of Interest rate in its implications on Bond Prices.

Or

Q. 3: (B). A company wants to issue a bond that is redeemable in four years for its nominal value or face value of \$100, and wants to pay an annual coupon of 5% on the nominal value. Estimate the price at which the bond should be issued.

The annual spot yield curve for a bond of this risk class is as follows:

One-year	3.5%
Two-year	4.0%
Three-year	4.7%
Four-year	5.5%

Q. 4: (A). Explain the relevance of Asset Backed Security markets in any economy. How will you create Asset backed security for Credit card loan accounts of ICICI Bank?

Or

Q. 4: (B). How Passive portfolio strategies work in Bond Portfolio? Use passive strategies to create a portfolio of Bond of your choice from Indian Capital markets.

SECTION - C

Read the case and answer the questions

10×02 = 20 Marks

Q. 5: Case Study:

RIL has issued bond with the following characteristics:

Coupon-	8%
Yield to maturity-	8%
Maturity-	15 Years
Macaulay Duration	10 years

Q. 5 (A). Calculate modified duration using the above information. Explain why modified duration is better measure than maturity when calculating the bond sensitivity to changes in interest rate.

Q. 5 (B). Identify the direction of change in modified duration if:

- i) The coupon of bond were 4%, not 8%
- ii) The maturity of the bond was 7 years, not 15 years.

Mapping of Questions with Course Learning Outcome

Question Number	COs	Marks Allocated
Q. 1:	CO1	10 marks
Q. 2:	CO2	10 marks
Q. 3:	CO3	10 marks
Q. 4:	CO4	10 marks
Q. 5:	CO2	20 marks