GL BAJAJ

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 |
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| Sub. Code- PGF-09 | Max Marks: $\mathbf{6 0}$ |

## 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 $\mathbf{1 0}$ 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
$10 \times 02=20$ 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 | $\mathbf{1 0}$ marks |
| Q. 2: | CO2 | $\mathbf{1 0}$ marks |
| Q.3: | CO3 | $\mathbf{1 0}$ marks |
| Q.4: | CO4 | $\mathbf{1 0}$ marks |
| Q. 5: | CO2 | $\mathbf{2 0}$ marks |

