

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

**POST GRADUATE DIPLOMA IN MANAGEMENT (2020-22)**  
**END TERM EXAMINATION (TERM -VI)**

Subject Name: **Fixed Income Security**  
Sub. Code- **PGF-09**

Time: **02.30 hrs**  
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.

**2×5 = 10 Marks**

**Q.1: (A).** Explain term-structure of interest rate in brief.

**Q.1: (B).** Explain the major participants in the fixed income securities market.

**Q.1: (C).** Discuss the credit risk associated with investing in bonds.

**Q.1: (D).** A zero coupon bond with a par value of Rs 20,000 due in four years from now is selling today for Rs 18,000. What is the yield to maturity?

**Q.1: (E).** Explain the classification of bonds based on Coupon.

**SECTION - B**

All questions are compulsory (Each question has an internal choice. Attempt any one (either A or B) from the internal choice)

**10 x 3 = 30 Marks**

**Q. 2: (A).** How the convexity of call able bond is different from non-callable bond?

**Or**

**Q. 2: (B).** what is modified duration, and what is the relationship between a bond's modified duration and its price volatility?

**Q. 3: (A).** An investor in the 28 percent tax bracket is trying to decide which of two bonds to purchase. One is a corporate bond carrying an 8 percent coupon and selling at par. The other is a municipal bond with a 5½ percent coupon, and it, too, sells at par. Assuming all other relevant factors are equal, which bond should the investor select?

**Or**

**Q. 3: (B).** A Rs 100 perpetual bond is currently selling for Rs 95. The coupon rate of interest is 13.5% and the appropriate discount rate is 15%. Calculate the value of the bond. Should it be bought? What is its yield to maturity?

**Q. 4: (A).** What are the two main types of passive bond portfolio management strategies? Explain with examples in detail.

Or

**Q. 4: (B).** Bond index mutual funds and exchange-traded funds (ETFs) using bonds have become increasingly popular in recent years.

a) Would it be more or less difficult to construct a bond index mutual fund than an equity index mutual fund? Give three reasons to support your argument.

b) Would it be more or less difficult to maintain a bond index ETF than an equity index ETF? Give three reasons to support your argument.

**SECTION - C**

Read the case and answer the questions

**10×02 = 20 Marks**

**Q.5: Case Study:**

The Clarence Corporation has issued bonds that pay semiannually with the following characteristics:

Coupon	Yield to Maturity	Maturity	Macaulay Duration
8%	8%	15 Years	10 Years

A). Calculate modified duration using the information provided above.

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

1. The coupon of the bond were 4 percent, not 8 percent.

2. The maturity of the bond were 7 years, not 15 years.

**Mapping of Questions with Course Learning Outcome**

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