



Name:	
Enrolment No:	

UPES

End Semester Examination, December 2024

Course: Fixed Income Securities

Program: BBA (Finance)

Course Code: FINC 3039

Semester : V

Time : 03 hrs.

Max. Marks: 100

Instructions:

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Which of the following is a debt instrument issued by the Indian government with a short-term maturity?		
a)	A) Treasury Bonds B) Treasury Bills C) Corporate Bonds D) Municipal Bonds	2	CO1
	What does the term 'coupon rate' refer to in fixed-income securities?		
b)	A) The maturity date B) The face value of the bond C) The interest rate paid by the bond D) The market price of the bond	2	CO1
	Commercial paper is typically issued by:		
c)	A) Central Government B) Corporations C) Municipalities D) State Governments	2	CO1
	Which factor most directly affects bond valuation?		
d)	A) Credit rating B) GDP growth rate C) Government Credit rating D) Bond maturity	2	CO1
	Which is the most commonly used benchmark yield curve in India?		
e)	A) SBI Prime Rate B) 10-year Government Bond Yield C) BSE Sensex D) NSE Nifty	2	CO1

f)	The duration of a bond measures: A) Its coupon frequency B) Price sensitivity to interest rate changes C) Time until maturity D) Credit quality	2	CO1
g)	The yield on a bond is inversely related to: A) Duration B) Credit rating C) Price D) Coupon rate	2	CO1
h)	Which type of fixed-income security pays interest that is exempt from taxation in India? A) Corporate bonds B) Tax-free bonds C) Commercial Papers D) Debentures	2	CO1
i)	Which type of bond is issued at a discount and redeemed at face value? A) Zero-coupon bond B) Convertible bond C) Perpetual bond D) Floating rate bond	2	CO1
j)	Which of the primary risks is associated with investing in fixed-income securities? A) Market Risk B) Inflation Risk C) Default Risk D) Liquidity Risk	2	CO1
SECTION B 4Qx5M= 20 Marks			
Q.2	Calculate the simple Yield of the fixed rate bond which paying coupon payment 7% annually and Saling at the discount price Rs. 970 with face value of Rs. 1000.	5	CO2
Q.3	Given that the semi-annual yield to maturity (YTM) of a bond is 4%, calculate the bond's annual YTM. Explain the process of converting the semi-annual YTM to an annual YTM and demonstrate how this conversion impacts the bond's yield.	5	CO2
Q.4	How does the primary market function in the Indian debt market?	5	CO2
Q.5	Describe Callable and Puttable Bonds.	5	CO2
SECTION-C 3Qx10M=30 Marks			

Q.6	Fixed income securities market face certain risks. Describe risks associated with investments in fixed-income instruments.	10	CO3
Q.7	Calculate the modified Duration of bond which paying YTM at 7% annum, and Duration of bond is 6. And tell the interpretation of the Modified duration.	10	CO3
Q.8	A 5% bond make coupon payment on June 15 and December 15, and is trading with a YTM of 4%. The bond is purchased and will settle on the august 21 when there will be four coupons remaining until maturity. Calculate the full price, accrued interest, and the flat price of the bond using actual days.	10	CO3

SECTION-D
2Qx15M= 30 Marks

Q.9	Parle Ltd., AAA rated company has issued, fully convertible bonds on the following terms, a year ago:																		
	<table border="1"> <tr> <td>Face value of Bond</td> <td>Rs. 1000</td> </tr> <tr> <td>Coupon rate</td> <td>8.5%</td> </tr> <tr> <td>Time to maturity (remaining)</td> <td>3 years</td> </tr> <tr> <td>Interest payment</td> <td>Annual, at the end of the year</td> </tr> <tr> <td>Principal repayment</td> <td>At the end of bond maturity</td> </tr> <tr> <td>Conversion ratio (No. of shares per bond)</td> <td>25</td> </tr> <tr> <td>Current market price per share</td> <td>Rs. 45</td> </tr> <tr> <td>Market price of convertible bond</td> <td>Rs. 1175</td> </tr> </table>			Face value of Bond	Rs. 1000	Coupon rate	8.5%	Time to maturity (remaining)	3 years	Interest payment	Annual, at the end of the year	Principal repayment	At the end of bond maturity	Conversion ratio (No. of shares per bond)	25	Current market price per share	Rs. 45	Market price of convertible bond	Rs. 1175
	Face value of Bond			Rs. 1000															
	Coupon rate			8.5%															
	Time to maturity (remaining)			3 years															
	Interest payment			Annual, at the end of the year															
	Principal repayment			At the end of bond maturity															
	Conversion ratio (No. of shares per bond)			25															
	Current market price per share			Rs. 45															
	Market price of convertible bond			Rs. 1175															
AAA-rated company can issue plain vanilla bonds without a conversion option at an interest rate of 9.5%.																			
Required:																			
Analyse the above data to calculate the following:																			
<ul style="list-style-type: none"> a) Straight value of bond b) Conversion value of the bond c) Conversion premium d) Percentage of downside risk e) Conversion Prity Price 																			
OR																			
A company has issued a bond with the following details:																			
<p>Coupon Rate: 12%</p> <p>Term of the Bond: 10 years</p> <p>Discount Rate for Valuation: 10%</p> <p>Maturity Value: INR 1,000</p> <ul style="list-style-type: none"> a) Compute the price of the bond today and one year from today. 																			

	b) Interpret the relationship between the bond's price and the discount rate, and explain how changes in market interest rates can affect the bond's valuation.		
Q.10	Investment in bonds provides a fixed income source to investors. You are required to explain the different types of bonds available in the market to make an investment and also how the valuation of a bond can be done to determine its fair value.	15	CO4