

VPM's
DR VN BRIMS, Thane
Programme: PGDM (2016-18) (Finance)
PGDM Trimester V Examination December 2017

Subject	Fixed Income Securities		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages	3	Date	23.12.2017

Note:

1. Question No. 1 is compulsory for 20 Marks.
2. Write any 4 from the rest of the Questions from Question No. 2 to Q. No. 7. Each 10 Marks.

- Q.1. A.** The interest rate is the cushion of Inflation. The Inflation is more independent than the Interest Rates. Inflation is depending on the Demand and supply in the economy. The interest rate moves along with the North and south movement of Inflation.

The Irving Fisher formulated the theory "single interest Theory" and established the Justice of Premium and Discount of the various Markets. The Financial Markets adjust to the need and supply of Money at National and International Levels.

The forward markets of Forex Markets gets adjusted according to the Inflation and interest Rates. We assume the Current Market Exchange rate is USD1=INR 65.6500. The inflation/Interest rate in USA being 2.5% and in India assumed to be 7.5% per annum. Find out the forward rates for 1 month, 2, 3, 4, 5, 6 months and forward rate for 101, and 202nd DAY.

- Q.1. B.** There are various approaches for calculating the cash flow of the Fixed Income securities. The most famous and popular among them is Time value calculation. The Bonds/Debentures are being calculated on the Time Value or on the Internal rate of Return Value.

The investments are made in the Fixed Income securities and Fixed Deposits through various methods. Paying instalments on regular basis (Equated monthly instalments) is the popular method for the investors.

Mr. Rajat invested 2,00,000/= today in a Bank. The Bank promised to pay Rs. 25,000/= for next 7 years and 33,333/= thereafter for 8 years. Is the investment worthwhile if the expected interest rate is 11% p.a. for Mr. Rajat?

If the interest rate expected by Mr. Rajat is changed from 11% to 12% do you think still it is workable? why? Give reasons for your answer. (1) While applying the formulas adopt both approaches. (Simple P. V. method and annuity method)

- Q.2. A. Write any Two**
- (i) Find the future value of annuity of Rs. 10,000/= made for 5 years @ 10%p.a.
 - (ii) Find the present value of Rs. 1,00,000 to be received after 6 years. Int. is 9% p.a.

- Q.2. B. Which of following project is best when calculated @12% p.a.**

Year	Project A Cash Flow	Project B Cash Flow
1	40 000	80 000
2	80 000	40 000

3	1,00,000	90 000
4	90 000	1,00,000
5	2,00,000	1,90,000
6	1,90,000	2,00,000

**Q.2. C. Find the HPR/ARR for the following Details :-
Bought by 1/1/2010 and sold on 31/12/2013.**

Co. Name	No. of shares bought	Bonus	Dividend	Bought Rate	Sold Rate	Brokerage
A	100	1:1	2000	100	110	On Purchase 0.5%
B	100	1:2	3000	100	120	
C	100	1:3	4000	100	130	On Sale 0.75%
D	100	1:4	1500	100	140	

Q.3. Write Any Two:-

- (A) How to apply time value in various situations?
- (B) Define annuity and with examples explain it.
- (C) What factors involved in the valuation of Bond?

Q.4. A. Find if accrued but not credited AS ON DATE:

Maturity Year	Amt (Crores)	Interest offered	Int. Paid last day on
2019	1.01	5%	June/Dec
2020	2.02	6%	July/Jan
2021	3.03	6.5%	Aug/Feb
2022	4.04	4.25%	Sept/March

Q.4. B. A GOI bond of Rs. 1000/= each has a coupon rate of 7.5% p.a. and maturity period is 20 years.
If the current Market price is Rs. 1050/= find the YTM.

Q.4. C. Write Notes on Forward Market and Premium and Discount.

Q.5. A. CITI Mumbai lending call Money 10.01 cr. to BOA Mumbai (a) 5.5% p.a. for 3 days. CITI Mumbai got the amount from CITI-Newyork in USD at 1.25% p.a. in Foreign Exchange, which converted in the Indian Market @ 65.6500 per usd.

BOA Mumbai lends it (the money borrowed from CITI Mumbai) to city union Bank Mumbai at the rate of 6.5% for 3 days.

Find the following:-

- (i) How much CITI-New York earned in USD?
- (ii) What is the net profit earned by BOA Mumbai by doing Arbitrage?
- (iii) What is the cost of borrowing for city union?

Q.5. B. Write about the various features of Debt securities.

Q.5. C. What risks involve in investing in Fixed income security like Bond or Debenture.

- Q.6. A. Find YTM of the following.**
- (i) Bond of Rs. 10,000 has a coupon rate of 7.5% p.a. maturity 20 years. The CMP Rs. 10,500/= find YTM.
 - (ii) Bond of Rs. 1000 F.V. Coupon rate 11%, 10 years maturity and the CMP Rs. 760/= Find YTM
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- Q.6. B.** A Bond of Rs.1000/- F.V. with a coupon of 7% redeemable after 5 years at a premium of 5% The required rate of return is 8% CMP of Bond is Rs. 940/-. (The present value of Rs. 1/= at 8% discounting rates are 0.9259, 0.8573, 0.7938, 0.7350, 0.6806. Is it worth buying at CMP?

- Q.6. C.** What are the advantages disadvantages of bonds?
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Q.7. Write Any Two.

- A.** Explain inflation Risk w.r.t. Fixed coupon Bonds.
- B.** Write in detail securitization of Debt.
- C.** Define Swap with illustrative example.