

--	--	--	--	--	--	--	--	--	--

Third Semester MBA Degree Examination, Dec.2014/Jan.2015

Investment Management

Time: 3 hrs.

Max. Marks:100

- Note: 1. Answer any THREE full questions from Q.No.1 to Q.No.6.**
2. Q.No.7 and Q.No.8 are compulsory.
3. Use of present value tables allowed.

- 1 a. Distinguish between bullish and bearish markets. (03 Marks)
 b. Discuss the utility of stock market index. (07 Marks)
 c. The returns on securities A and B are given below:

Probability	Security A	Security B
0.5	4	0
0.4	2	3
0.1	0	3

Give the security of your preference based on return and risk. (10 Marks)

- 2 a. What is a depository? What is its role in stock trading? (03 Marks)
 b. Write short notes on: i) Book building, ii) Under writing. (07 Marks)
 c. A stock costing ₹ 120 pays no-dividends. The possible prices that the stock might sell for at the end of the year with respective probabilities are as follows:

Price	115	120	125	130	135	140
Probability	0.1	0.1	0.2	0.3	0.2	0.1

Calculate the expected return. Calculate the standard deviation of returns. (10 Marks)

- 3 a. What are the basic assumptions of CAPM? (03 Marks)
 b. A person owns a ₹ 1000 face value bond with five years to maturity. The bond makes annual interest payments of ₹ 80. The bond is currently priced at ₹ 960. Given that the market interest rate is 10 percent, should the investor hold or sell the bond?
 Given: Present value factor (5 years, 10%) = 0.6209
 Present value annuity factor (5 years, 10%) = 3.7908 (07 Marks)
 c. A chemical company paid a dividend of ₹ 2.75 during the current year. Forecast suggests that earnings and dividends of the company are likely to grow at the rate of 8 percent over the next 5 years and at the rate of 5 percent thereafter. Investors have traditionally expected a rate of return of 20 percent on these shares. What is the present value of stock? (10 Marks)

- 4 a. Explain the basic principles and hypothesis of Dow theory. (05 Marks)
 b. "The first step in industry analysis is to determine the stage of growth through which the industry is passing." Explain. (05 Marks)
 c. Find the duration of a 6 percent coupon bond with a face value of ₹ 1000 making annual interest payments, if it has 5 years until maturity. The bond is redeemable at 5 percent premium at maturity. The market interest rate is currently 8 percent. (10 Marks)

- 5 a. Differentiate between open-ended and closed-ended mutual funds. (05 Marks)
 b. A company has equity shares of the face value of ₹ 10. It just paid an annual dividend of ₹ 4. The dividend is expected to grow at 9 percent per annum perpetually. The company is quite consistent. It has an equity capitalization rate of 15%. What is the intrinsic value of the shares? If the company belongs to risk class of 14 percent, what would be the value? (05 Marks)

- c. The following portfolios are available to an investor:

Portfolio	Return	Risk	Other details
A	16%	4%	$\sigma_m = 9\%$
B	21%	6%	$R_m = 21\%$
C	24%	10%	$R_f = 12\%$

Find out whether these portfolios are efficient or not, given that risk-free interest rate is 12%, return on market portfolio is 21 percent and risk of the market portfolio is 9%.

(10 Marks)

- 6 a. Consider a portfolio composed of 5 securities. All the securities have a beta of one and unique risk (standard deviation) of 25%. The portfolio distributes weight equally among its component securities. If the standard deviation of market index is 18%, calculate the total risk of the portfolio. (05 Marks)
- b. The riskless securities are offering a return of 6%, while return on the market portfolio is 12%. The standard deviation of the market portfolio is 3%. An investor has constructed a portfolio which has a standard deviation of 1.2% and a correlation with the market return is 0.75. Find out the expected return of the investor. (05 Marks)
- c. What is random walk theory? What does it project in its weak form, semi-strong form and strong form? (10 Marks)

7 **Skill based questions:**

- a. "Investment is well grounded and carefully planned speculation" – Discuss. (05 Marks)
- b. Describe the key economic variables that an investor must monitor as part of his fundamental analysis. (05 Marks)
- c. What is the significance of studying support and resistance levels in technical analysis? (05 Marks)
- d. Pearl and Diamond are the two mutual funds. Pearl has a mean success of 0.15 and diamond has 0.22. Diamond fund has double the beta of pearl funds 1.5. The standard deviations of pearl and diamond funds are 15% and 21.43%. The mean return of the market index is 12% and its standard deviation is 7. Risk free rate is 5%. Compute the Trynor and Sharp indices for the funds and interpret the results. (05 Marks)

8 **Case study:**

Answer the following TWO questions:

- a. Show how the following investors are natural candidates for different asset allocation policies.
- Mahesh – a retiree with modest means who recently retired from government services. He owns an apartment, lives with his wife, receives an annual pension of ₹ 1,80,000, has savings of ₹ 5 lakh. He had received a sum of ₹ 20 lakh from pension fund. He wants to prevent erosion of his capital and increase his wealth.
 - Praveen – an MBA aged 30 years working in a MNC expecting career advances. He inherited ₹ 10 lakh from his grandpa. He wants to build a sizeable portfolio in the next 20 years. (10 Marks)
- b. Monthly return data (in percent) are presented for CTS stock and BSE National Index for a 8 month period.

Month	1	2	3	4	5	6	7	8
CTS	10	15	18	14	16	16	18	4
Index	12	14	13	10	9	13	14	7

What is the beta of stock CTS? What is its characteristic line?

(10 Marks)

* * * * *