

M.Com. 4th Semester Examination, 2010

**SECURITY ANALYSIS AND PORTFOLIO
MANAGEMENT**

PAPER — CM-2203

Full Marks : 50

Time : 2 hours

The figures in the right-hand margin indicate marks

*Candidates are required to give their answers in their
own words as far as practicable*

UNIT—I

1. Answer any *two* questions from the following : 5 × 2

(a) Discuss the general misconceptions about speculation. Which type of analysis for equity investment is applicable for the speculators and why?

(b) What are the different components of systematic risk?

(c) Explain the term, 'yield-to-maturity'.

(d) Write a short note on 'Industry Analysis'.

2. Answer any *one* question from the following : 10 × 1

(a) From the following share price and market index data, calculate beta coefficient of the company and interpret the value from statistical significance.

DATA BSE Sensex Reliance Industries Ltd.

Date	Close Value	Close Price in Rs.
31/03/2010	17528	1075
01/04/2010	17693	1094
05/04/2010	17936	1125
06/04/2010	17941	1121
07/04/2010	17970	1129
08/04/2010	17714	1104
09/04/2010	17933	1124
12/04/2010	17853	1126

Date	Close Value	Close Price in Rs.
13/04/2010	17822	1121
15/04/2010	17639	1090
16/04/2010	17591	1083
19/04/2010	17401	1062
20/04/2010	17461	1064
21/04/2010	17473	1054
22/04/2010	17574	1076
23/04/2010	17694	1087
26/04/2010	17745	1070
27/04/2010	17691	1061
28/04/2010	17380	1017
29/04/2010	17503	1035
30/04/2010	17559	1033
03/05/2010	17386	1024
04/05/2010	17137	1021
05/05/2010	17088	1021
06/05/2010	16988	1011
07/05/2010	16769	1034
10/05/2010	17331	1080
11/05/2010	17142	1067

Date	Close Value	Close Price in Rs.
12/05/2010	17196	1082
13/05/2010	17266	1072
14/05/2010	16995	1044
17/05/2010	16836	1017
18/05/2010	16876	1021
19/05/2010	16408	998
20/05/2010	16520	1000
21/05/2010	16446	996
24/05/2010	16470	1021
25/05/2010	16022	987
26/05/2010	16388	1007
27/05/2010	16666	1022
28/05/2010	16863	1034
31/05/2010	16945	1045
01/06/2010	16572	1012

(b) From the following data of share prices of a company, draw all classical technical analysis charts. For P & F chart, the reversal criterion may be taken to be Rs. 3. Box size may be ideally assumed.

Share Price (in Rs.)- Sonata Software Ltd.

Date	Open Price	High Price	Low Price	Close Price
19/05/2010	52	53	51	51
20/05/2010	51	52	49	49
21/05/2010	49	49	47	48
24/05/2010	49	49	46	46
25/05/2010	47	47	43	43
26/05/2010	45	46	43	45
27/05/2010	46	46	44	45
28/05/2010	46	47	46	47
31/05/2010	45	48	45	48
01/06/2010	47	48	44	45

UNIT—II

3. Answer any *two* questions from the following : 5×2

(a) State the objectives of portfolio management.

(b) Mr. Anand, an investor is analysing two investment alternatives, *A* and *B*. Their

estimated return along with their chances of occurrence is given below :

<u>Probability of occurrence</u>	<u>Rate of return</u>	
	<u>A</u>	<u>B</u>
0.40	12%	15%
0.30	10%	16%
0.30	14%	9%

He asks you to determine the relationship between the two alternatives which will help him to decide further. You are asked to help the investor by making necessary calculations.

(c) Mr. Chandan wants to invest in the equity shares of Prosperous Ltd.. The following information is given by him :

(i) The investment will be for an infinite period,

(ii) His cost of capital is 12%,

(iii) The expected dividends from the company during the first three years will be as follows :

<u>Year</u>	<u>Dividend (Rs.)</u>
1	12
2	8
3	15

Then onwards, the dividend is expected to grow at a constant rate of 10%.

(iv) The present market price of the share is Rs. 125.

You are asked to suggest whether Mr. Chandan should invest in the share now. Show necessary calculations.

(d) Write a short note on "Sharpe Ratio".

4. Answer any *one* question from the following : 10×1

(a) (i) Mr. Kamal owns three funds, the information about which is given below :

<u>Fund</u>	<u>Beta</u>	<u>Return</u>
Preity	1.10	12%
Asha	1.35	14%
Koel	0.80	9%

The Market portfolio having a beta of 1.00 gives 11% return. It is also mentioned that risk-free rate of return is 8%.

Since, Mr. Kamal needs funds immediately for his daughter's marriage, he wants to sell off one fund. As a financial analyst, what would be your suggestion to him? Show necessary calculations.

(ii) X Ltd. and Y Ltd. give the following information relating to expected risk and return :

	<u>X Ltd.</u>	<u>Y Ltd.</u>
Return	20%	28%
Risk (σ^2)	25%	36%

Correlation coefficient = 0.40.

(I) Calculate the portfolio risk if 50% is invested in each of them.

(II) Determine the correlation coefficient that will be necessary to change the portfolio risk (variance) to 4. $5 + (2 + 3)$

(b) (i) ABC Co. Ltd. currently issues 16% redeemable debentures, face value of which is Rs. 100. Floatation cost is 2%. If the redemption period is 5 years from the time of issue and the redemption will be at a premium of 5%, calculate the present value of the debentures of the issuer company and to an individual investor.

Given :

Cost of capital of ABC Ltd. = 10%

Cost of capital of an individual

investor = 12%

Corporate tax rate = 30%

Tax rate for an investor = 20%.

(ii) Discuss the constant Growth Model of valuation of equity shares. $(3 + 3) + 4$

[*Internal Assessment* : 10 Marks]