Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/MBA/SEM-3 (FT) & 5 (PT)/FM-303/2012-13

2012

SECURITY ANALYSIS & PORTFOLIO MANAGEMENT

Time Allotted : 3 Hours   Full Marks : 70

The figures in the margin indicate full marks.

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

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :

$10 \times 1 = 10$

i) If the changes in stock prices are not affected by the previous changes in stock prices then

a) the filter test is effective

b) the auto correlation is zero

c) the run test is significant

d) the prices are not moving at random.

ii) Diversification reduces

a) Interest rate risk   b) Market risk

c) Unique risk   d) Infliation risk.

iii) The buying and selling activities of the arbitrageur

a) increases the profit

b) brings equilibrium level

c) creates disequilibrium

d) reduces the profit margin.

iv) Identify the uncontroliable risk of a company

a) Labour problem

b) Increase in loan service charges

c) cut in subsidy

d) technological obsolescence.

v) Mr. *X* expects 20 per cent return from his investment. The dividend from the *Y* stock is Rs. 2·0 and and the present price is Rs. 50. What should be the future price of the stock ?

a) Rs. 58 b) Rs. 60

c) Rs. 55·33 d) Rs. 63·33.

vi) A stock of Rs. 10 face value has declared 35% dividend for the current year. The stock is currently selling for Rs. 40. What is its dividend yield ?

a) 35% b) 70%

c) 8·75% d) 8·5%.

vii) According to constant growth model, the next year's dividend is 20%, required rate of return is 10% and the growth rate is 15%. The market price would be

a) Rs. 50 b) Rs. 55

c) Rs. 45 d) Rs. 40.

viii) The NSE Nifty index fund consists of

a) the stocks of high market capitalisation in NSE

b) Blue chip companise stocks of the index

c) all the stocks of the Nifty index

d) consists 90% of the stocks of the index leaving stocks of lesser importance.

ix) The market timer is a

a) Professional portfolio manager

b) Active portfolio manager

c) Passive portfolio manager

d) None of these.

x) Aggressive portfolio consists of bonds stocks in the ratio of

a) 60 : 40 b) 70 : 30

c) 40 : 60 d) 50 : 50.

xi) The rupee cost averaging approach seems to work better with

a) Cyclical stock price

b) Declining stock price

c) Rising stock price

d) Rising stock, price with cyclical patienms.

xii) In the rupee cost averaging plan when the stock prices are low

a) a prefixed amount is spent on shares

b) higher amount of money is allocated to shares

c) lower amount of money is allocated to shares

d) more money is spent on bonds.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. What do you understand by systematic and unsystematic risks ?

3. A bond whose par value is Rs. 1,000 bears a coupon rate of 12% and has a maturity period of 3 years. The required rate of return on the bond is 10%. What is the value of this bond ?

   (PVIFA 10%, 3 years) = 2·487,

   (PVIF 10%, 3 years) = 0·751.

4. Find expected return on the market portfolio.

Share	*Dividend* (*Rs.*)	*Market Price at the Beginning* (*Rs.*)	*Market Price at the end* (*Rs.*)	*Capital Gain (loss)* (*Rs.*)
A	5	100	110	10
B	5	100	80	(–) 20
C	5	10	40	30
D	10	100	115	15
	25	310	345	35

5. 5 year zero-coupon bond has a face value of Rs. 1,000. The bond is redeemable at par after 5 years. The required yield rate on the bond is 6%. Comparable coupon bonds pay half-yearly coupons. Determine value of the bond.

6. Explain the difference between Security Market Line (SML) and Capital Market Line (CML).

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. The equity shares of *S*. Ltd. are presently trading at Rs. 96 per share. The company has recently paid a dividend of Rs. 3·00 per share. A security analyst has projected the following information for the next year :

Scenario	*Optimistic*	*Normal*	*Pessimistic*
Probability	30%	40%	30%
Projected share price	Rs. 110	Rs. 105	Rs. 99
Projected dividend	Rs. 4	Rs. 3	Rs. 3
Projected market return	15%	12%	8%

You are required to

i) Find out the expected return and risk for the equity shares of the company.

ii) Find out the expected return and risk for the market

iii) Estimate the beta coefficient for the equity shares of the company and state its implication.

8. The rates of return on Stock *A* and market portfolio for 15 periods are given below :

Period	*Retrn on Stock A (%)*	*Retrn on Market Portfolio (%)*
1	10	12
2	15	14
3	18	13
4	14	10
5	16	9
6	16	13
7	18	14
8	4	7
9	– 9	1
10	14	12
11	15	– 11
12	14	16
13	6	8
14	7	7
15	– 8	10

What is the beta for Stock *A* ?

9. a) The equity stock of Rax Limited is currently selling for Rs. 30 per share. The dividend expected next year is Rs. 2·00. The investors' required rate of return on this stock is 15%. If the constant growth model applies to Rax Limited, what is the expected growth rate ?

b) The expected return of stocks *P* and *Q* are 16% and 18% respectively and the standard deviation are 25% and 30% respectively. If correlation coefficient between *P* and *Q* is (–) 1·0, what is the expected return of a portfolio constructed to drive the standard deviation of portfolio return to zero ?

c) The risk-free rate is 8% and the expected return on the market portfolio is 14%. The beta of stock *A* is 1·25. Calculate the return stiplulated by Security Market Line (SML).

10. An investor has a choice of four stocks for investment. Their rates of return and probabilities are given below :

A		***B***		***C***		***D***	
R %	***P %***	***R %***	***P %***	***R %***	***P %***	***R %***	***P %***
– 30	20	20	15	– 20	20	– 10	10
0	40	0	35	10	40	0	25
30	30	20	15	40	30	10	40
70	10	40	5	80	10	20	25

Are all these stocks attactive investments ? Give reasons. Of those that are attractive, how should the investor choose one to buy ?

11. a) Mutual Fund has 200 shares of *XYZ* Co., currently trading at Rs. 14 and 200 shares of *ABC* Co. currently trading at Rs. 140. The fund has issued 150 shares.

i) What is the NAY of the fund ?

ii) If investors expect the price of the *XYZ* Co's shares to increase to Rs. 18 and price of *ABC* Co.'s to decline to Rs. 110 by the year. What is the expected Rs. 110 by the end of the year.

b) Explain how and investor realizes an interest when he purchases a zero coupon bond ?

12. a) What is meant by an efficient market ?

b) Discuss about different levels of market efficiency.

c) What is the impact of efficient market hypothesis on fundamental and technical analysis ? 3 + 9 + 3