## M.Com. 4th Semester Examination, 2013

# SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

PAPER - COM- 403

Full Marks: 50

Time: 2 hours

### Answer all questions

The figures in the right hand margin indicate marks

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

Illustrate the answers wherever necessary

### UNIT - I

- 1. Answer any two questions from the following:  $5 \times 2$ 
  - (a) Following prices were noted for a share,

(Turn Over)

## X for the given period:

<u>Day</u>	Opening (in Rs.)	Closing (in Rs.)	_		
1	32	34	36	31	
2	35	37	38	32	
3	35	36	39	35	
4	/ 3 <b>6</b> ∞ <sup>3</sup>	34	36	32	
5	35	33	38	32	

Draw simple far chart and candlestick chart with the help of the above data.

- (b) Explain Markowitz's mean-variance rule.
- (c) Mr. I, an investor invested in the shares of P. Co. Ltd. by buying from open market @Rs. 53 per share as on 15-04-11. The company declared a dividend on its equity shares @15% for the financial year, 2010-11, which was ultimately paid after three months from the due date. The company went for a bonus issue for the next financial

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effe year divi 30-0 12 % the from all the	in the ratio of 1:1, which was given at after two months' time from the end. The company paid an interim lend of 9% for the half-year ended on 9-12, but declared a final dividend of for the financial year, 2012-13. Both lividends were paid after two months the respective due dates. Mr. I sold the shares, having a face value of Rs. 10, @ Rs. 75 as on 31-03-13. Calculate nolding period rate of return to Mr. I.	
Disc effic	uss various forms of market iency.	5
wer	ny <i>one</i> question from the following: $10 \times$	1
(i)	Distinguish between fundamental analysis and technical analysis.	4
(ii)	Explain the following terms used by the technicians: 2 ×	3
	(I) Support level	
, t	(II) Resistance level	
	(III) Head and shoulders.	٠.

(d)

(a)

- (b) (i) Distinguish between 'coupon rate' and 'yield-to-maturity'.
  - (ii) Distinguish between interest rate risk and purchasing power risk.
  - (iii) Give one example each in the categories of leading and lagging economic indicators and elucidate why these indicators are so categorised. 4 + 3 + 3

#### UNIT - II

- 3. Answer any *two* questions from the following:  $5 \times 2$ 
  - (a) Define efficient frontier. Distinguish between efficient portfolio and feasible portfolio.
  - (b) The equity share of Plus Ltd. (having a face value of Rs. 10) is trading at Rs. 165. The management of the company is expected to declare dividends every year which will grow at the rate of 15 %. Mr. Kamal wants to invest in the share and he feels that the value of the share will appreciate to Rs. 210 in five years. As a investment analyst, what

wil	l your advic	e be to Mr.	. Kama	regarding
his	investment	decision?	Show	necessary
cal	culations.	•		_

(c) Two assets, A and B, have the following risk and return characteristics:

$$R_A = 22 \%$$
,  $R_B = 20 \%$ ,  $\sigma_A = 15$ ,  $\sigma_B = 18$ ,  $r_{AB} = -1$ 

Compute portfolio return and risk if 40% is invested in asset A and the remaining in asset B.

- (d) Explain the Jensen index of portfolio performance.
- 4. Answer any one of the following:  $10 \times 1$ 
  - (a) (i) What are the assumptions of capital Asset Pricing Model?
    - (ii) What do you understand by bond duration? Determine the bond duration in the case of a five year bond (face value of Rs. 100) which offers a coupon rate of 9% and which will be redeemed at 5% premium on maturity cost of capital is 10%.

      4 + (3 + 3)

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- (b) (i) The effect of diversification depends on the correlation between securities. Explain the statement in the case of a two-security portfolio.
  - (ii) You are asked to evaluate five portfolios which aim at faster capital appreciation. The details regarding the return and the risk are given below:

Portfolio	A	В	C	D	E
Return(%)	17.5	19.0	15.0	18-5	20.0
Standard Deviation	15	16.8	16.5	18	17.5
Beta	1.8	2.1	1.6	1.85	1.95

Assuming the risk-free rate to be 5 % and the market return as 12.5%, you are required to rank the funds using Sharpe's and Treynor's ratio. 6 + 4

[Internal Assessment - 10 Marks]