M.Com. 4th Semester Examination, 2015

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

PAPER - COM-403

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

Illustrate the answers wherever necessary

UNIT - I

[Marks : 20]

- 1. Answer any two questions from the following: 5×2
 - (a) Explain 'filter rule' as a buy and sell strategy. 5
 - (b) What is Beta? How is it interpreted? 3+2

(Turn Over)

(c) Mr. I bought shares of X Co. Ltd. @ Rs.32 as on 30.06.2012. The company had announced cash final dividend of 14% on 30.05.2012 for the financial year 2011-2012 and paid it just after 40 days. Meanwhile, the company had declared and paid an interim dividend (a) 6% by December, 2011 for the half-year ended on 30.09.2011. In the next year, due to lack of adequate liquid cash resource, the company did not announce any cash dividend in spite of maintaining the net profit trend of its earlier years. The company went for a bonus issue thereafter as on 30.06.2013 in the ratio of 1:2 which was given effect to the shareholders' accounts with in 40 days from the time of announcement. The company paid a dividend for the financial year, 2013-14 @12%, the final payment of which was completed by June, 2014. Mr.I sold out all the shares as on 31.01.2015 @ Rs.35. Incidentally, just before his decision of sale, he also received a credit in his bank account for an interim dividend declared by the

company for the half-year ended on 30.09.2014. On the date of receiving the dividend, the yield rate was calculated to be 0.06. On the basis of the given information, calculate the holding period rate of return to Mr. I. Face value of shares may be assumed to be Rs.10.

5

- (d) Explain the weak form of the efficient market hypothesis.
- 2. Answer any *one* question from the following: 10×1
 - (a) Following information is available about the share market price of X Co. Ltd.:

| <u>Day</u> | <u>High</u> | Low | Opening | Closing |
|------------|-------------|-----|----------------|---------|
| 1 | 55 | 52 | 53 | 54 |
| 2 | 59 | 52 | 54 | 59 |
| 3 | 60 | 55 | 60 | 57 |
| 4 | 63 | 56 | 62 | 63 |
| 5 | 60 | 53 | 60 | 55 |

(Turn Over)

| Day | High | Low | Opening | Closing |
|-----|------|------|----------------|---------|
| 6 | 59 | 58 | 58 | 59 |
| 7 | 62 | 58 | 58 | 60 |
| 8 | 65 | 60 | 63 | 64 |
| 9 | 66 | 60 | 65 | 60 |
| 10 | 68 | . 62 | 63 | 65 |
| 11 | 69 | 62 | 64 | 66 |
| 12 | 70 | 63 | 66 | 64 |
| 13 | 70 | 65 | 68 | 69 |
| 14 | 71 | 64 | 69 | 66 |
| 15 | 69 | 67 | 68 | 67 |

(Market prices above are given in Rs. unit)

From the above, draw all possible classical technical tool based charts. In case of Point and Figure chart, reversal criterion may be Rs.2 and box size may be Rs.1.

(b) (i) Explain the concept of Industry life cycle. Describe the different stages in the industry life cycle. 2+3

(ii) A stock costing Rs.120 pays no dividends. The possible prices that the stock may sell at the end of the year with the respective probabilities as follows:

| Price(in Rs.) | Probability |
|---------------|--------------------|
| 115 | 0.1 |
| 120 | 0.1 |
| 125 | 0.2 |
| 130 | 0.3 |
| 135 | 0.2 |
| 140 | 0.1 |

calculate the expected return and the standard deviation of returns. 3+2

UNIT - II

[Marks : 20]

3. Answer any two questions:

 5×2

(a) Explain the terms 'entry load', 'Net asset value' and 'Callable bond'. 1+2+2

(Turn Over)

(b) Mr. Yogesh has created a portfolio consisting of two securities, P and Q. The details are given below:

| Particulars | Security P | Security Q | |
|---------------------------|------------|------------|--|
| Investment (%) | 80 | 20 | |
| Standard deviation (%) | 10 | 12 | |
| Correlation coefficient | (-)1-00 | | |

You are required to compute:

- (i) The portfolio risk, and
- (ii) The weights in the two securities that will reduce the portfolio standard deviation to nil. 3 + 2
- (c) What is efficient Frontier? Explain with the help of a diagram.
- (d) Explain the importance of valuation of securities. Find the value of a share from the following:

Expected rate of dividend Rs.8 per share for next year.

Growth rate of dividend is @ 11%.

Required rate of return @12%.

2 + 3

4. Answer any one of the following:

 10×1

- (a) (i) Discuss in brief the structure of a mutual fund organization.
 - (ii) Mrs. Sharmila wants to purchase a bond (having face value of Rs.1,000) issued by Logistic Ltd. which is going to mature after four years. The coupon rate on the bond is 16% and the redemption value on maturity will be at a premium of 2%. You are required to determine the intrinsic value of the bond, assuming that return on similar bonds is 13%.
- (b) (i) Calculate weighted average return of the following of portfolio comprising 4 securities. Individual return of each security is given below:

| Security | Proportion of Investment in Portfolio | Return from securities | |
|----------|---|------------------------|--|
| P | 12% | 15% | |
| Q | 20% | 10% | |
| R | 9% | 25% | |
| S | 25% | 16% | |

(ii) Calculate the Expected Rate of Return and Standard Deviation for measuring risk. Expected Return and probabilities are:

| Return (%) | 12 | 18 | 25 | |
|---------------|------|------|------|----|
| Probabilities | 0.40 | 0.30 | 0.30 | 10 |

[Internal Assessment: 10 Marks]