

# II Semester M.Com. (F.A.) Examination, June/July 2018 (CBCS) (Semester Scheme)

## Paper - 2.4 : SECURITIES ANALYSIS AND PORTFOLIO MANAGEMENT

Time: 3 Hours

Max. Marks: 70

#### SECTION - A

Answer any seven sub-questions. Each question carries two marks:

 $(7 \times 2 = 14)$ 

- 1. a) Distinguish systematic and unsystematic risk.
- b) What is pre-emptive right of shareholders?
  - c) What is the breadth of the market?
  - d) What is meant by riding the yield curve?
  - e) Bring out the significance of P/E ratio.
  - f) What are oscillators under technical analysis?
  - g) Define efficient frontiers.
  - h) State any two assumptions under Arbitrage theory.
  - i) What is the significance of formula plans?
  - j) Who are liquidity traders?

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Answer any four of the following questions. Each question carries five marks:

(4×5≔20)

2. Bring out the differnces between investment and speculation.

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3. Ram is considering purchase of two securities A and B. The estimated returns and their probabilities are as under

Probability	Securities	s Return %	
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0.25	10	8	
0.45	12	14	
0.30	13	12	

- Determine:
- a) Average rate of returns of stocks
  - b) Standard deviations.
  - 4. Explain the utility of economic analysis and state the factors to be examined.
  - The following information is provided regarding the performance of mutual funds A, B and C for a period of 6 months. The risk free rate of interest is 9%. Rank the funds under sharps index method.

Fund	Rp%	σр	β (Beta)	
25	(Expected Return)	(Standar	d deviation)	
Α	25.38	4.00	0.23	
В	25.11	9.01	0.56	
С	25.01	3.55	0.59	

- 6. Stocks are considered risky, but bonds are not. Discuss.
- 7. Bring out the differences between forward contracts and futures contract.

## SECTION - C TOWN WILLIAM THE LOW

Answer any three of the following questions. Each question carries 12 marks:

(3×12=36)

8. The returns of ABC Ltd. at present is 21%. This is assumed to grow for the next 5 years at 21%. After that it is assumed to have a growth rate of 10% perpetually. The dividend paid for the year 2015-16 is 32%. The required rate of return is 20%. Face value of equity shares Rs. 10.

What is the estimated price according to two stage model?



- 9. Dow's theory is a useful tool to trace the trend of stocks in the market. Discuss.
- Discuss the role of Securities and Exchange Board of India as a market regulator.
- X Ltd. and Y Ltd. have the following expected risk and return inputs for the next vear.

Expected return (ER<sub>x</sub>) = 15%, standard deviation = 4%

Expected return (ER<sub>v</sub>) = 18%, standard deviation = 5%

Correlation coefficient  $(r_{xy}) = 0.60$ .

- a) Determine the expected return (ER<sub>p</sub>) of the portfolio with equal proportion of the stocks X and Y.
- b) Portfolio risk with the above proportion.
- Determine the correlation coefficient that will be necessary to reduce the portfolio risk by 75%.
- 12. An investor wants to build a portfolio with the following four stocks. From the following particulars, determine the portfolio return and risk with equal proportion of stocks.

Company	Alpha (α)	Beta (β)	Residual variance
A Ltd.	0.17	0.93	45.15
B Ltd.	2.48	1.37	132.25
C Ltd.	1.47	1.73	196.28
D Ltd.	2.52	1.17	51.98

Market return  $(R_m) = 11\%$ 

Market return variance = 26.

# II Semester M.Com. (FA)/MFA Examination, July 2017 (CBCS)

### Paper - 2.4: SECURITIES ANALYSIS AND PORTFOLIO MANAGEMENT

Time: 3 Hours

Max. Marks: 70

Instruction: Answer all the Sections.

#### SECTION - A

Answer any seven sub questions of the following. Each question carries two marks.

 $(7 \times 2 = 14)$ 

- 1. a) What are the types of financial assets?
  - b) What is fundamental analysis?
  - c) What is discounted cash flow model?
  - d) What is a non marketable financial asset?
  - e) What is security market line?
  - f) How expected rates of return are calculated?
  - g) Distinguish between arbitrage and hedging.
  - h) Define portfolio insurance.
  - i) What is earning multipliers?
  - j) What is the objective of company analysis?

#### SECTION - B

Answer any four of the following. Each question carries five marks.

 $(4 \times 5 = 20)$ 

- 2. Explain the three forms of efficient market hypothesis.
- 3. What are the assumptions of portfolio theory? Explain.
- 4. Write a note on international portfolio management.



- 5. For the first 4 years XYZ firm is assumed to grow at a rate of 10%. After 4 years the growth rate of dividend is assumed to decline linearly to 6%. After 7 years the firm is assumed to grow at a rate of 6% infinitely. The next year dividend is Rs. 2 and the required rate of return is 14%. Find out the value of the stock.
- 6. A stock is currently selling for Rs. 60. The call option on the stock exercisable a year from now is available at an exercise price of Rs. 55. The stock can rise by 35%, and it can fall by 30%. The risk free rate of interest is 12 percent. What is the value of the call option?
- 7. How many inputs are needed for a portfolio analysis involving 40 securities for short pay and Markowitz models? Explain.

#### SECTION - C

Answer any three of the following questions. Each question carries twelve marks.  $(3\times12=36)$ 

- 8. Discuss the concept of an Industry Life Cycle by describing each of its four phases with suitable industrial examples. In which phase of the life cycle, investments in an industry are most attractive and why?
- 9. Discuss the constant growth dividend discount model and explain the impact of growth on price, dividend yield, capital gains yield and price earnings ratio.
- 10. A mutual fund analyst has collected the following past performance reports of 5 funds and the Sensex. Based on the given below information calculate Sharpe's ratio and Jensen's ratio. Assume that the risk free rate is 7%. Explain the behaviour of rankings.

	Return (%)	Standard Deviation	Beta
Α	16.5	25.6	1.25
В	15.3	20.5	0.95
С	9.5	15.8	0.85
D	22.5	16.5	1.15
Е	18.5	13.5	1
Market	14.0	13.5	1.00



11. Given below is the Market information of market rates of return and data from two companies A and B (%).

,	Year 2014	Year 2015	Year 2016
Market	12.0	11.0	9.0
Company A	13.0	11.5	9.8
Company B	11.0	10.5	9.5

Determine the Beta coefficients of the shares of the company A and B.

12. Determine portfolio risk involved with the help of following information:

No.	Scrip Name	Weight of Scrip (%)	Standard Deviation (%)	Correlation between A & B
1	Α	60	25	+0.65
2	В	40	20	

# Second Semester M.F.A. Examination, June 2016 (Semester Scheme) FINANCE AND ACCOUNTING Paper – 2.4 : Securities Analysis and Portfolio Management

Time: 3 Hours

Max. Marks: 80

#### SECTION - A

- Answer any ten questions in about 3-4 lines. Each question carries 2 marks:
   (2×10=20)
  - a) What are the objectives of investment?
  - b) What is co-relation between two securities?
  - c) What are colour portfolios?
  - d) What are risk-free assets?
  - e) Define duration of bonds.
  - f) Mr. A buys a share and holds it for a year. He expects a dividend of Rs. 2 next year. He sells the share at an expected price of Rs. 21. If the required rate of return is 15%, what is the present value of the share?
  - g) What is non-diversifyable risk?
  - h) What are zero coupon bonds?
  - i) What is immunisation?
  - j) What are defensive shares?
  - k) What is Security Market Line?
  - 1) Distinguish between business risk and financial risk.

#### SECTION-B

Answer any three questions in about one page each. Each question carries 5 marks :

 $(3 \times 5 = 15)$ 

- 2. What are bonds? Explain different types of bonds.
- 3. What is portfolio revision? Explain the types of formula plans used in portfolio revision.
- 4. What is Term-structure of interest? Explain the theories covered under Term-structure of interest.



- 5. ABC Ltd. is currently paying a dividend of Rs. 2.75 per share. It is expected that the earnings and dividends of the company are likely to grow at 8% over the next 5 years and stabilise there after 5%. What is the present value of the shares if the required rate of return is 20%?
- 6. The Government of India is proposing to sell a 5 year bond of Rs. 1,000 at 8% coupon rate. The bond will be amortised equally over its life. If an investor has a minimum required rate of return of 7%, what is the present value of the bond?

#### SECTION-C

Answer any two questions in about 3 pages each. Each question carries 15 marks:

(2×15=30)

- 7. Explain in detail the Dows theory and how it is used to determine the direction of stock market?
- 8. What is the role of RBI in security market?
- 9. Explain the Bond Value theories with examples.
- 10. From the following particulars, determine the yield to maturity (ytm) and volatility of the bond:

Face Value – Rs. 1,000, Coupon interest – 16% PA payable annually, years to maturity – 6 years.

Redemption Value - Rs. 1,000, current market price - Rs. 964.50.

#### SECTION - D

#### 11. Compulsory:

15

The following information is provided regarding the performance of funds namely Birla Advantage, Sundaram Growth Fund and Sun F and C Value for a period of 6 months ending Aug. 2010. The risk free rate of interest is assumed to be 9%. Rank the funds under:

- 1) Sharpe Index and
- 2) Treynors index.

Fund	$R_{p}$	$Q_{p}$	β
Birla Advantage	25.38	4	0.23
Sundaram Growth	25.11	9.01	0.56
Sun F and C Value	25.01	3.55	0.59



# II Semester M.F.A. Examination, June 2015 (CBCS)

# Paper – 2.4 : Securities Analysis & Portfolio Management

#### SECTION - A

Answer any seven questions out of ten. Each question carries two marks.  $(7 \times 2 = 14)$ 

- 1. a) Define new issue market.
  - b) What is yield curve?
  - c) What are leveraged portfolios? The small soup priviol of the desired and the name of the control of the cont
  - d) What are heads and shoulders?
  - e) What is minimum portfolio risk?
  - f) What is call money market? If he would be provided entire the said of the s
- g) What is coefficient of determination?
  - h) What are negotiable securities? Give examples.
  - i) What is security analysis?
  - j) What is meant by In-the-money in a call option?

25 militali		Year
	30	1BeY
2):		2012
		2013
		2014

#### SECTION - B

Answer any four out of six. Each question carries five marks.

 $(4 \times 5 = 20)$ 

- 2. Bring out the differences between investment and speculation. The land and all and the differences between investment and speculation.
- 3. An investor purchases a bond at a price of Rs. 900 with Rs. 100 as coupon (interest) payment and sells the bond for Rs. 1,000.
  - a) What is the holding period return? beholding as bhehivib to eler rilword enti-
  - b) If the bond is sold for Rs. 750 after receiving Rs. 100 as coupon payment, then what is the holding period return?



- 4. Distinguish between efficient frontiers and efficient portfolios.
- 5. Discuss the impact of changes in interest rates and inflation rate on bonds.
- Following data gives the market return and A Ltd. Scrip's return for a particular period.

| II | III | IV V VI VII VIII | IX | Scrip A Ltd. return | 0.70 | 0.50 | 0.60 | 0.50 | 0.60 | 0.80 | 0.50 | 0.80 | 0.40 | 0.50 | 0.60 | 0.30 | 0.50 | 0.60 | 0.30 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |

Find Beta and Alpha of A Ltd. Scrip.

7. What are the assumptions of CAPM? Distinguish between CML and SML.

#### SECTION-C

Answer any three of the following questions. Each question carries twelve marks. (3x12=36)

- 8. Explain in detail Dows theory and how it is applicable to determine the direction of stock market.
- 9. Stocks X and Y display the following return over the past three years.

Year	Return %	
Year	Х	Υ
2012	14	12
2013	16	18
2014	20	15

- a) Determine the expected rate of return on portfolio made up of 40% of X and 60% of Y.
- b) What is the standard deviation of each security?
- c) Determine the portfolio risk of a portfolio made up of 40% of X and 60% of Y.
- 10. For the first four years A Ltd. is assumed to grow at a rate of 10%. After 4 years, the growth rate of dividend is assumed to decline linearly to 6%. After 9 years, the company is assumed to grow at 6% indefinitely. The next year dividend is Rs. 2 and the required return is 14%. Find out the value of the stock.



- 11. Explain the sharpe index model. How does it differ from Mancowitz model.
- 12. A Ltd. and B Ltd. have the following expected risk and return inputs for the following years.

Year	Return %	Variance o <sup>2</sup> %
A Ltd. lyr	15	16
B Ltd. Ilyr	18	25

Portfolio risk (standard deviation) for a portfolio of 50% in each asset is 4.03. Determine the correlation coefficient that will be necessary to reduce the level of portfolio risk by 75%.

What is the expected return of the equally weighted portfolio [50% of A Ltd. and 50% of B Ltd.?