

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.

(For candidates admitted during the academic year 2015 - 2016)

SUBJECT CODE: 15CM/ME/PF55

B.Com.DEGREE EXAMINATION NOVEMBER 2017

COMMERCE

FIFTH SEMESTER

COURSE : MAJOR – ELECTIVE

PAPER : PORTFOLIO MANAGEMENT

TIME : 3 HOURS

MAX. MARKS: 100

SECTION A

Answer ALL questions

(10 x 2 =20 marks)

1. What is Portfolio management?
2. Explain the term “Security Market Line”.
3. What do you mean by Technical analysis?
4. Distinguish between Bond price and Time.
5. What is Portfolio evaluation?
6. A had purchase bond at a price of Rs 800 with a coupon payment of Rs 150 and sold it for Rs 1000. What is his holding period return?
7. The expected return on a market portfolio is 8% and the risk premium is 5%. Find out the expected return of the portfolio if its historical beta is .85 or its expected  $\beta$  is 1.05.
8. ARs 100 par value bond bearing a coupon rate of 12 percent will mature after five years. What is the value of the bond, if the discount rate is 15 percent?
9. Explain the term “Earning per shares”
10. There are two securities X and Y. Both follow same pattern of risk and reward. Security X has expected return of 10% and it volatility is 20%. However, the volatility of security Y is 40%. Find out expected return of security Y if the risk free rate of interest is 8%.

SECTION B

Answer any FIVE questions.

(5 x 8 =40 marks)

11. Explain the Systematic and Unsystematic Risk.
12. What are the assumptions of CAPM? Is there any limitation of this model?
13. The equity stock of Rax limited is currently selling for Rs 30 per share. The dividend expected next year is Rs 2. The investors required rate of return on this stock is 15 percent. If the constant growth model applies to Rax limited, what is the expected growth rate?
14. Following information available is respect of a bond:  
Face value Rs 1000  
Coupon rate 9%  
Maturity 20 years  
Yield to Maturity 8%  
Callable in 5 years Rs 1050  
Find out the Approx. YTC.
15. Following information is available regarding four mutual funds:

Mutual Fund	Return, R	Risk, $\sigma$	$\beta$ (Beta)
A	13%	16	.90
B	17%	23	.86
C	23%	39	1.20
D	15%	25	1.38

Evaluate performance of these mutual funds using Sharpe Ratio and Treynor's Ratio. Comment on the evaluation after ranking the funds, given that the risk free rate is 9%.

16. The  $\alpha$  and  $\beta$  values for a security are 3% and 1.6%. The market rate of return is 13%. Find out the expected return of the security. Apply Single Index Model.
17. Ashok Rai has a portfolio of Five securities whose expected return and amount invested are as follows:

	I	II	III	IV	V
Amount	Rs 1,50,000	Rs 2,50,000	Rs 3,00,000	Rs. 1,00,000	Rs. 2,00,000
Expected Return	12%	9%	15%	18%	14%

Find out the percentage expected return of the portfolio.

### SECTION C

Answer any TWO questions.

(2 x 20 =40marks)

18. XYZ Limited has investment in 3 companies A Ltd, B Ltd, and C Ltd,. following information is available in respect of these investments:

Company	Investment Rs	$\beta$
A Ltd	6,00,000	1.3
B Ltd	3,00,000	1.4
C Ltd	1,00,000	0.9

Expected return on the market portfolio is 15% and the risk free rate of interest in 6%. Find out the expected  $\beta$  and return of the portfolio.

19. The market price of aRs 1000 par value bond carrying a coupon rate of 14% and maturing after 5 years is Rs 1050. What is the Yield to Maturity(YTM) on this bond? What is the approximate YTM? What will be the realized yield to maturity if the reinvestment rate is 12 percent?
20. Following information is available in respect of certain securities:

Security	$\beta$	Expected Return
I	1.4	22%
II	1.2	16%
III	1.1	14%

The market return is 16% and the risk free rate is 6%. Find out whether these securities are correctly priced or not. Also find out the  $\alpha$  (Jensen's Measure) for these securities.

21. Stocks X and Y display the following returns over the past three years:

Year	Return of X	Return of Y
2010	14	12
2011	16	18
2012	20	15

- What is the expected return on a portfolio made up of 40% of X and 60% of Y?
- What is the standard deviation of each stock?
- Determine the correlation coefficient of stock X and Y.
- What is the risk of the portfolio made up of 40% of X and 60% of Y?

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