STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2015 – 2016 and thereafter)
SUBJECT CODE: 15CM/ME/PF55
B.Com. DEGREE EXAMINATION NOVEMBER 2019
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. Define Portfolio Management.
2. Mention any two types of risk.
3. An investor purchases a bond at Rs.900 with Rs.100 as coupon payment and sells it at Rs.1000. What is his holding period return?
4. List any two assumptions of capital asset pricing model.
5. How many inputs are needed for a portfolio analysis involving 40 securities in the Sharpe and Markowitz models?
6. What is mean by fundamental analysis?
7. Write a note on single index model.
8. An investor is able to borrow and lend at the risk free rate of 12%. The market portfolio of securities has an expected return of 20% and a standard deviation of 25%. Determine the expected return and standard deviation of the portfolios if all wealth is invested in the risk-free asset.
9. Antique Arts Company would pay Rs.2.50 as dividend per share for the next year and it is expected to grow indefinitely at 12%. What would be the equity value if the investor requires 20% return?
10. The equity stock of Max Limited is currently selling for Rs.30 per share. The dividend expected next year is Rs.2.00. The investor's required rate of return on this stock is 15 %. If the constant growth model applies to Max Limited, what is the expected growth rate?

SECTION B

Answer any FIVE questions.   **(5 x 8 =40 marks)**

11. Explain different types of risk?
12. Briefly explain the trends given in the Dow theory.
13. Alpha and Beta Co-efficients for five stocks are given below.

Stocks	Alpha	Beta
Craft High Corp	1.0	0.8
Crown Corp	1.35	1.15
Courtesy Corp	1.18	1.25
Cute Corp	1.25	0.95
Cure Corp	1.5	1.4

Rank the five stocks using Jensen's performance measure.

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14. The following details are given for X and Y companies stocks and the Bombay sensex for a period of one year. Calculate the systematic and unsystematic risk for the companies' stocks. If an equal amount of money is allocated for the stocks what would be the portfolio risk?

	X Stock	Y Stock	Sensex
Average return	0.15	0.25	0.06
Variance of return	6.30	5.86	2.25
B	0.71	0.27	-
Correlation Co-efficient	-	0.424	-

15. Arvind is considering buying a Rs.1000 par value bond bearing a coupon rate of 11% that matures after five years. He wants a minimum yield to maturity of 15%. The bond is currently sold at Rs.870. Should he buy the bond?

16. Security J has a beta of 0.75 while security K has a beta of 1.45. Calculate the expected return for these securities, assuming that the risk free rate is 5% and the expected return of the market is 14 %.

17. A Rs.100 par value bond bears a coupon rate of 14% and matures after five years. Interest is payable semi-annually. Compute the value of the bond if the required rate of return is 16%.

SECTION C

Answer any TWO questions.   **(2 x 20 =40marks)**

18. The following information is available.

	Stock A	Stock B
Expected Return	16%	12%
Standard deviation	15%	8%
Co-efficient of Correlation	0.60	

   (a) What is the covariance between stocks A and B?
   (b) What is the expected return and risk of a portfolio in which A and B have weights of 0.6 and 0.4.

19. Khushal is considering the purchase a bond currently selling at Rs.878.50. The bond has four years to maturity, with a face value of Rs.1000 and 8% coupon rate. The next annual interest payment is due after one year. The required rate of return is 10%.
   (a) Calculate the intrinsic value (present value) of the bond. Should Khushal buy the bond?
   (b) Calculate the yield to maturity of the bond.

20. Table gives data for Anand products (Rs. In Lakh)

Data for Anand products

	2017		2017
Assets	6000	Revenues	6600
Short-terms liabilities	450	Operating expenses	5950
8% debentures	1250	EBIT	650
10% bonds	500	Interest	150
Common stocks(Rs.10 par)	3500	EBT	500
Surplus	300	Taxes	200
		Dividend	50

(a) Calculate the following ratios.
   1. Asset turnover
   2. Effective interest rate
   3. Effective tax rate
   4. Debt/equity ratio
   5. Dividend payout rate
(b) Expected growth rate of EBIT

21. Jaswanth firm is trying to decide two out of the four investment funds. From the past performance, they were able to calculate the following average returns and standard deviation of these funds. The current risk free rate of interest is 9%. Using the appropriate performance measure, suggest two funds for investment:

	Alpha Funds	**Vinu Funds**	**Meenu Funds**	**Arvind Funds**
Average Return	17	18	16	14
Standard Deviation	19	20	13	12

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