STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2008-09)

SUBJECT CODE : CM/MC/PF64

B.Com. DEGREE EXAMINATION APRIL 2011
COMMERCE
SIXTH SEMESTER

COURSE	**:**	**MAJOR – CORE**	
PAPER	**:**	**PORTFOLIO MANAGEMENT**	
TIME	**:**	**3 HOURS**	**MAX. MARKS : 100**

SECTION – A

ANSWER ALL QUESTIONS: **30 x 1 = 30**
FILL IN THE BLANKS:

1. _________ is a measure of non diversified risk.
2. ________model leads to the comparison of market return to scrip return.
3. ______________ represents the equilibrium condition that prevails in the market for portfolios consisting of risky and risk free securities.
4. The higher the _____________ the more risky is the project or portfolio.
5. ________ plots the relationship between the required rate of return and systematic risk.
6. _________ is useful to provide insights for the finance manager to maximize the value of the firm.
7. The _____________ is built upon the assertion that measures of stock prices tend to move together.
8. The term ______________ is used to mean wide range of techniques based on the concept that past information on prices and trading volume of stocks gives the investor a picture of what lies ahead.
9. The extension of the __________ to the right arises from a very large amount of short selling to increase the risk and return on the portfolio.
10. The objective of port folio management is to _________ and to maximize returns
11. ________ refers to the income component in relation to some price for a security.
12. Interest rates and inflation are an integral part of the real forces behind _________ and are part of the larger category of uncontrollable influences.
13. Investment analysts and portfolio managers continuously monitor and evaluate the ___________.
14. _________ Model is based on the exposure to market risk and the degree of diversification of the portfolio.
15. Risk penalty under Markovitz model mean _____ .
16. The straight line tangent to the efficient frontier line is called ________ .
17. Random diversification means diversification as a technique of __________ portfolio.
18. In CAPM the investor aims at maximizing the ______ rather than the wealth or return.
19. If the risk free rate is 3% and the market risk premium is 7.8% and β of the security is 1.2 then the expected return of the security under CAPM is _____.
20. Rs 100 bond matured in 10 years and offers 10 % coupon rate with a required rate of return of 13% the value of the bond is __________ .

2..

CHOOSE THE CORRECT ANSWER:

21. S is considering buying a 13 percent five year bond that pays interest once per year. The bond sells for Rs 1,036 which represents a 12 % yield to maturity . What is the bond's duration?
 a. 4.3 8 b. 4.74 c. 3.26 d. 3.99

22. What is the value of preference share where the dividend rate is 18% on a Rs 100 par value? The appropriate discount rate for a stock of this risk level is 15%.
 a. 110 b. 120 c. 115 d 118

23. The preference shares of K ltd are selling for 47.5 per share and pays a dividend of Rs 2.35 in dividends. What is your expected rate of return if you purchase the security at market place?
 a. 4.95 b. 5.45 c. 4.5 d. 5.25

24. Given the following information and the assumption of the single index model , what is the beta factor of stock?
 a. 0.08 b. 0.75 c. 0.9 d. 0.88

25. Assume the two securities X and Y constitute the market portfolio. Their proportions and variances are 0.49, 150 and 0.51, 324 respectively. The covariance is 175. Find the beta of Y.
 a. 1.32 b. 1.45 c. 1.21 d. 1.78

26. What is the elasticity of a ten year zero coupon bond priced to yield 10 %.
 a. .909 b. .809 c. 932 d. .872

27. An investor is considering the purchase of the debenture with 3 years maturity, at 11% interest at Rs 100 and if the selling price is 97.59 what is its promised YTM.
 a. 13% b. 12% c. 11% d 12.5%

28. P has invested in X ltd . The capitalization rate of the company is 15% and the current dividend is Rs 2 per share Calculate the value of the company's equity share is the company is slowly sinking with an annual decline rate of 5% in the dividend.
 a. 13.33 b. 8.5 c. 9.5 d. 12.5

29. A portfolio consists of three securities P,Q, R with the following parameters

	P	Q	R
Expected return	25	22	20
Standard deviation	30	26	24

 If the securities are equally weighted find the expected portfolio return.
 a.12.23 b. 20.33 c. 22.33 d. 23.23

30. Find the market sensitivity index from the following.

Standard deviation of the asset	2.5%
Market standard deviation	2%
Risk free rate of return	13%
Expected return on market portfolio	15%
Correlation co-efficient of portfolio with market	0.8

 a. 2 b. 1 c. 1.5 d. 1.2

SECTION - B **(5 x 8 = 40)**

ANSWER ANY FIVE QUESTIONS:

31. Briefly explain the Capital Asset Pricing Model.

32. What is a corner portfolio? What is its role in creating an efficient frontier?

33. a) Calculate the value of equity share from the following:

Equity share capital of Rs 10 each	5,00,000
Reserved and surplus	50,000
10% secured loan	2,50,000
12% Unsecured loan	1,00,000
Fixed assets	3,00,000
Investments	50,000
Operating profit	2,50,000
Tax rate	50%
P/E ratio	12%

b) X ltd has been growing at 15% per year and this trend is expected to continue for 5 more years. Thereafter it is likely grow at 8%. The investors expects a return of 12% The dividend paid by the firm per share for the last year corresponding to period 0 (T_0) is Rs 5. Determine the price a t which an investor may be ready to buy the shares of the company at the end f the period 0. (T_0)

34. Distinguish between systematic risk and unsystematic risk; and capital market line and security market line.

35. What are the factors that should be considered by a portfolio manager in an efficient market?

36. A ltd has an expected return of 22% and standard deviation of 40 % B ltd has an expected return of 24% and standard deviation of 38%. A ltd has a beta of 0.86 and B ltd has a beta of 1.24. The correlation coefficient between the return of A ltd and B ltd is 0.72. The standard deviation o f the market return is s0% Suggest
    a. Is investing in B ltd better than investing in A ltd
    b. If you invest 30% in B ltd and 70% in A ltd, what is your expected rate of return and portfolio standard deviation.
    c. What is the market portfolio expected rate of return and how is the risk- free return?
    d. What is the beta portfolio if A ltd is weight is 70% and B ltd weight is 30%

37. a) A firm borrows 50,00,000 at an interest of 12% and the loan is to be repaid in 5 equal installments payable at the end of each of the next 5 years. Prepare a loan amortization schedule.

b) A portfolio consists of three securities 1,2 and 3. The proportions of these securities are $w1 = 0.5$, $w2 = 0.3$ and $w3 = 0.2$. The standard deviations f the returns are $\sigma1 = 6$, $\sigma2 = 8$ and $\sigma3 = 9$. The co-efficient of correlations are $r12 = 0.5$, $r13 = 0.6$ and $r23 = 0.75$. What is the variance of the portfolio return.

SECTION - C **(1 x 30 = 30)**

38. A naïve investor wants to analyze the capital structure of a company. He has the following information of ABC Company Limited.

Particulars	**1990**	**1995**	**1998**
Long term debt (11%)	12.27	9.46	11.19
Preferred Stock (10%)	0.13	0.13	0.12
Common stock (Rs. 10)	0.01	0.14	12.6
Capital surplus	5.67	6.35	6.19
Retained earnings	33.93	60.31	125.2
Dividend3.005 paid	3.005	3.684	10.08

The present price of the share in Mumbai Stock Exchange is Rs. 450. There is a rumour in the market that the ABC Company Limited may issue bonus shares shortly.
ABC Company Limited has the following asset categories with the following expected returns.

Expected Returns (%)

Year	**Asset A**	**Asset B**	**Asset C**
1999	12	16	12
2000	14	14	14
2001	16	12	16

The investor wants the answers for the following:

a. Is there any ground for such rumour?
b. Is the capital structure sound?
c. Is it proper to purchase the shares?

Analyze the given data and advice him.

You have also been asked to create two portfolios one consisting of Asset A and B and the other consisting of Asset A and C by investing equal proportions in each of the two component assets.

d. What is the average expected return for each asset over the three year period?
e. What is the standard deviation for each asset expected return?
f. What is the average expected return and standard deviation for each of the two portfolios?
g. How would you characterize correlation of returns of the two assets making up each of the two portfolios?
h. Which portfolio do you recommend? Give reasons.

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