

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2008-09 & thereafter)
SUBJECT CODE : CM/MC/PF64

B.Com. DEGREE EXAMINATION APRIL 2013
COMMERCE
SIXTH SEMESTER

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

SECTION – A

ANSWER THE FOLLOWING: **(30 x 1 = 30 Marks)**

Choose the best answer:

1. The single index model is widely employed to allocate investments in the portfolio among
a) Equity shares b) Debt instruments c) Derivates d) Preference shares
2. Growth policy in portfolio gives priority to
a) Current income of the portfolio b) Capital appreciation of the portfolio
c) Balanced portfolio construction d) Tax savings.
3. Which of the following always involve predicting an uncertain future and mistakes will be made and outlooks will differ?
a) Fundamental analysis b) Technical analysis
c) Security analysis d) Vertical analysis
4. Which of the following invest in undervalued stocks as determined by fundamental financial analysis?
a) Growth funds b) Value funds c) Mutual funds d) Hedge funds
5. Weak form market efficiency
a) implies that the expected return on any security is zero.
b) incorporates semi-strong form efficiency.
c) involves price and volume information.
d) is compatible with technical analysis.
6. Tests of the semistrong EMH include:
a) Regression analysis.
b) Correlation tests that compare the security returns to the overall market return.
c) tests of the speed of adjustment of stock prices to company announcements.
d) queuing line theory tests.
7. If an investor wants to avoid transaction costs, which of the following strategy should he opt?
a) Active strategy b) Passive strategy c) Buy and hold strategy d) Sector rotation
8. Which of the following is an investment which is spread across various sectors of the market to limit the exposure to any one sector to thus protect against loss?
a) Design portfolio b) Modeling portfolio
c) Architecture portfolio d) Balanced portfolio
9. Which of the following stages of the industry life cycle offers the highest potential returns and greatest risk?
a) Pioneering stage b) Stabilization stage c) Declining stage d) Expansion stage
10. Which of the following item when kept constant generally gives a high bond's duration with its time to maturity?
a) Exchange rate b) Flat rate c) Mortgage rate d) Coupon rate
11. Which of the following affects the price of the bond?
a) Market interest rate b) Required rate of return
c) Interest rate risk d) All of the given options

12. Which one of the following is not an efficient portfolio?
- Portfolio which gives the highest return at a particular level of risk.
 - Portfolio which gives minimum risk for given levels of return
 - Portfolio which gives a higher return at the same risk or lower risk
 - Portfolio which gives lower return at the lower risk
13. The return from holding a stock consist of:
- Capital appreciation and dividend
 - Capital gains
 - Market price
 - Dividend at the beginning.
14. An equity share is a
- Fixed income bearing security
 - Variable income bearing security
 - Hybrid security
 - All of the above.
15. The security market line considers only
- The systematic risk
 - Borrowing
 - Borrowing and lending
 - Independent variables
16. Which of the formula is TRUE for calculating retained earnings?
- Retained Earnings = Net Earnings – Dividends
 - Retained Earnings = Net Earnings + long term debt
 - Retained Earnings = Net Earnings + short term debt
 - Retained Earnings = Net Earnings + dividend
17. A growth company is one where
- $r = k_e$
 - $r < k_e$
 - $r > k_e$
 - All the above
18. Earning per share (EPS) is
- $$\frac{\text{Profit after tax} - \text{Preference dividend}}{\text{No. of equity shares}}$$
 - $$\frac{\text{Profit before tax}}{\text{No. of equity shares}}$$
 - $$\frac{\text{Profit before tax} - \text{Preference dividend}}{\text{No. of equity shares}}$$
 - None
19. A stock is selling for Rs. 40 and earns Rs. 4 annually. What is its price earning ratio?
- 10 : 1
 - 10%
 - 10 times
 - 5 times
20. Which of the following involves dividing an investment portfolio among different financial assets?
- Securitization
 - Sector rotation
 - Asset allocation
 - Risk aversion
21. Who was the developer of CAPM?
- Markowitz
 - Joseph Granville
 - John Bollinger
 - W.J. Baumol
22. Consider the CAPM. The risk-free rate is 5% and the expected return on the market is 15%. What is the beta on a stock with an expected return of 12%?
- .5
 - .7
 - 1.2
 - 1.4
23. The market portfolio has a beta of _____.
- 1.0
 - 0
 - 0.5
 - 1.0
24. Security A has an expected rate of return of 12% and a beta of 1.10. The market expected rate of return is 8% and the risk-free rate is 5%. The alpha of the stock is _____.
- 1.7%
 - 3.7%
 - 5.5%
 - 8.7%
25. Which of the following is used in economic analysis?
- Gross domestic product (GDP)
 - Surveys
 - Labour cost
 - Diffusion indexes
26. Security analysis is most concerned with:
- analysis of the overall securities market and its direction.
 - valuation and analysis of individual securities.
 - purchasing securities at the best price.
 - determination of the investor's required return.

27. Stocks and bonds would be classified as:
 a) real assets b) indirect assets c) personal assets d) financial assets
28. In general, the ex ante risk-return tradeoff
 a) slopes upward b) slopes downward c) is flat d) is impossible to determine
29. Investment decision making traditionally consists of two steps:
 a) investment banking and security analysis
 b) buying and selling
 c) risk and expected return.
 d) security analysis and portfolio management.
30. Which of the following is considered a risk free asset?
 a) Equity b) Bond c) Debenture d) Fixed deposits with nationalized banks

SECTION – B

ANSWER ANY FIVE OF THE FOLLOWING:

(5 x 8 = 40 Marks)

31. Explain the steps involved in the Portfolio Management. Compulsory.
32. Discuss the causes of risk.
33. Find the portfolio variance of a portfolio consisting of equities, bonds and real estate, if the portfolio weights are 30%, 45% and 35%. The standard deviations are 0.1986, 0.615 and 0.945 respectively. The correlations are 0.40 per equity and bonds, 0.30 for equities and real estate and 0.25 for bonds and real estate.
34. ABC Company's equity shares currently sell at Rs. 70 per share. The finance manager of ABC Ltd. expects a constant growth rate of 5 % and an end of year dividend of Rs. 4.20 per share.
 (a) If an investor requires a rate of return of 10 percent, should he buy the share?
 (b) What will be the expected rate of return?
35. Explain the concept of economic analysis for investment decisions.
36. A bond of Rs. 1,000 being a coupon rate of 14% is redeemable at par in 10 years. Find out the value of bond if:
 (i) required rate of return is 12% or 10% .
 (ii) required rate of return is 16% and the maturity period is 9 years or 13 years.
 (iii) required rate of return is 14% and redeemable at Rs. 1050 or at Rs. 1,150 after 10 years.
37. Define the Efficient Market Hypothesis in each of its three forms. Briefly explain its implications?

SECTION – C

CASE STUDY:

(30 Marks)

Alpha Ltd (AL) has been successful and has enjoyed a good growth trend. Now AL is planning to go public with an issue of equity and it faces the problem of setting an appropriate price on the equity. The company and its bankers believe that the proper procedure is to select several similar firms with publicly traded equity and to make relevant comparisons. Several gem companies are reasonably similar to AL with respect to product mix, asset composition and debt/equity proportions. Of these companies, Beta Ltd (BL), Gamma Ltd (GL) are most similar. When analyzing the following data assume that 2005 and 2012 are reasonably "normal" years for all the three companies – that is, these years were neither especially good nor especially bad in terms of sales, earnings and dividends. At the time of analysis expected return(r) was 18%.

Particulars	BL	GL	AL (Total value Rs.)
EPS			
2012	6.5/share	9/share	Rs. 15 crore
2005	4/share	6/share	Rs. 10.50 crore
Price per share (2012)	42/share	75/share	
Dividend per share			
2012	3.5/share	4.5/share	Rs. 8 crore
2005	2.25/share	3.25/share	Rs. 6 crore
Book value	40/share	55/share	Rs. 110 crore
Market/Book ratio	120%	118%	
Total Assets 2012	Rs. 320 crore	Rs. 900 crore	Rs. 400 crore
Total debt 2012	Rs. 150 crore	Rs. 400 crore	Rs. 200 crore
Sales 2012	Rs. 500 crore	Rs. 1800 crore	Rs. 500 crore

- Assume AL has 1 crore share outstanding. Use their information to calculate EPS, DPS and book value/share for AL for both the years.
- Calculate CAGR of earnings and dividend for three companies considering 1 crore as o/s shares for AL.
- On the basis of your answer to part (a) do you think AL shares would sell at price in the same range as that of BL & GL.
- Assuming the AL's company management can split the stocks so that 1 crore shares could be changed to 10 crore shares or any other number, would such an action make sense in this case why?
- Assume that AL did split its stock and has 5 crore shares. Calculate new values for EPS, DPS & Book value/share.
- Calculate ROE's for the three companies for 2012.
- Calculate the dividend payout ratios for the three companies for 1997 taking o/s shares as 5 crores.
- Calculate the Debt/total assets ratios for three companies 2012.
- Calculate the PE ratios for BL and GL for 2012. Are these PEs reasonable in view of relative growth, payout and ROE data. If not, what other factors might explain them?
- Determine a range of values for AL stock price, with 5 crore shares o/s by applying BL and GL PE ratios, Price/Dividend and Price/Book value ratios to your data AL.
- Using constant growth stock price model, find a price for AL stock with 5 crore shares outstanding.
- At what price do you think AL shares should be offered to the public with 5 crore shares outstanding? You will want to select a price that will be low that it will rise sharply immediately after it is issued, consider relative growth rates, dividend yields and total returns.
