STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086.
(For candidates admitted during the academic year 2004-2005 \& thereafter)

## SUBJECT CODE : CM/MO/PF64

## B.Com. DEGREE EXAMINATION APRIL 2008 <br> COMMERCE <br> SIXTH SEMESTER

COURSE : MAJOR - OPTIONAL PAPER : PORTFOLIO MANAGEMENT TIME : 3 HOURS

MAX. MARKS : 100

## SECTION - A

## ANSWER ALL QUESTIONS:

$(10 \times 3=30)$

1. Distinguish between active portfolio strategy and passive portfolio strategy.
2. Portfolio management is a complex activity which may be broken down into specific steps. Enumerate the same.
3. What are the common investment goals of individuals?
4. State any three key assumptions behind Markowitz in relation to portfolio theory.
5. The following table gives an analyst's expected return on two stocks for particular market returns:

| Market returns | Aggressive stock | Defensive stock |
| :---: | :---: | :---: |
| $6 \%$ | $2 \%$ | $8 \%$ |
| $20 \%$ | $30 \%$ | $16 \%$ |

What are the betas of the 2 stocks?
6. Consider the following -

Risk free rate =9\%
Expected return on the market returns $=15 \%$
Standard deviation of the market returns $=10 \%$
Calculate the return and risk of the portfolio formed with $50 \%$ of investible wealth in the market portfolio and $50 \%$ in riskless assets.
7. A Rs. 100 par value bond bearing a coupon rate of $16 \%$ (paid semi-annually) will mature after 3 years. What is the value of the bond, if the expected yield to maturity is $14 \%$ ?
8. UNPA Limited is facing gloomy prospects. The earnings and dividends are expected to decline at the rate of $5 \%$. The previous dividend was Rs. 4.50 per share. The current market price is Rs.18.00. What rate of return do investors expect from this stock?
9. Big B Limited recently declared and paid a dividend of Rs. 5 per share. The retention ratio was found to be $50 \%$. The $\mathrm{P} / \mathrm{E}$ ratio of the firm is 24 times. The current market price is Rs.252. Determine whether the stock is efficiently priced.
10. What do you understand by "call option" and "put option" in the context of derivatives market (Stock segment)?

## SECTION - B

ANSWER ANY FIVE QUESTIONS:
11. Explain the Barnewall two-way model.
12. Distinguish fundamental and technical analysis in the context of securities (any three major differences are to be highlighted).
13. Explain the meaning of the term "Asset allocation" and discuss as to what is meant by Strategic Asset allocation.
14. Discuss the various risks faced by investors in bond market.
15. Yuvi and Kim Products currently pays a dividend of Rs. 6 per share and this dividend is expected to grow at a $15 \%$ annual rate for 3 years, after which it is expected to grow at a $8 \%$ forever. What value would you place on the equity if $10 \%$ rate of return were required?
16. The following data is available in respect of a bond -

Face value : Rs.1,000
Coupon : 14\% payable annually
Years to maturity : 6
Redemption : At par
Current market price: Rs.974.50
Compute Yield to Maturity.
17. The following data is made available to you in respect of stocks A and B-

| State of Economy | Probability | Expected return on stock |  |
| :--- | :---: | :---: | :---: |
|  |  | A | B |
| Good | $1 / 3$ | $15 \%$ | $18 \%$ |
| Normal | $1 / 3$ | $20 \%$ | $16 \%$ |
| Bad | $1 / 3$ | $25 \%$ | $14 \%$ |

a. What is the expected return and risk on each of these securities?
b. Do you think creating a portfolio by investing equal proportions (50\%) in each of them will be beneficial? Justify.
c. Identify the minimum variance portfolio with the help of these two stocks.

## SECTION - C

## ANSWER ANY TWO QUESTIONS:

18. Explain the three forms of EMH in brief.
19. What is CAPM? What are the major assumptions behind this model? What is the graphical representation of this model known as and what is the significance of this in the context of security analysis? Are there any major criticisms of this model?
20. Rajesh is 35 years old now. He plans to retire when he turns 55 years. He would like to receive an annual pension of Rs. 1 lakh per annum thereafter for twenty years.
a) How much he had to deposit now in an investment scheme with an insurance company that would provide the required pension, if the rate of return is $12 \%$ p.a.?
b) How will your answer change, if instead of one lumpsum deposit now, Rajesh wants to make annual deposits of equal amounts from now till he retires?
c) Revise your answer to a) and b) if the rate of return on investment changes to $8 \%$ p.a. What do you observe and explain the significance of the change?
21. a) From the following particulars, compute the beta of the stock and comment -

| State of Economy | Probability | Market return(\%) | Stock return (\%) |
| :--- | :---: | :---: | :---: |
| Good | 0.30 | 18 | 24 |
| Normal | 0.40 | 15 | 30 |
| Boom | 0.20 | 24 | 18 |
| Recession | 0.10 | 12 | 35 |

b) A trader buys the following options simultaneously on a stock whose current market price is Rs. 173 -

Put option - Strike Price : Rs. 171 Premium $=$ Rs. 10
Call option - Strike Price : Rs. 175 Premium = Rs. 5
For what range of spot price on expiration, can he hope to make profits?

