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PARUL UNIVERSITY
FACULTY OF MANAGEMENT
MBA., Winter 2017-18 Examination
Semester: 3
Subject Code: 06201202
Date: 02/01/2018
Subject Name: Security Analysis \& Portfolio Management

## Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

## Q. 1 Do as Directed.

## A).Multiple choice type questions/Fill in the blanks. (Each of 1 mark)

1. Standard deviation determine
a) systematic risk of a security
c) total risk of security
b) unsystematic risk of security
d) premium of security
2. Suppose an investment provides the following periodic return over last four years as below:

| Year | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Return (\%) | 10 | 12 | -6 | 12 |

What is the holding period return?
a) $5.72 \%$
b) $7.62 \%$
c) $6.72 \%$
d) $8.72 \%$
3. ExxonMobil Corporation (NYSE: XOM) has a beta coefficient of 0.88 . What is its cost of equity if the risk free rate is $4 \%$ and return on the broad market index is $8 \%$ ?
a) $5.72 \%$
b) $7.52 \%$
c) $6.52 \%$
d) $8.72 \%$
4. Holding two securities will not decrease the risk occupied by an investor if those two securities are
a) perfectively positive correlated
c) no correlation
b) perfectively negative correlated
d) All of the above
5. Which of the following terms represents an upper price limit for a stock, based on the quantity of willing sellers?
a) Resistance
c) Trend line
b) Support
d) Channel
B).Define the following. (Each of 1 mark)

1. Systematic risk
2. Risk return trade-off
3. Bond Duration
4. Unsystematic Risk.
5. Stop loss order
C).Direct questions. (Each of 1 mark)
6. What is Dow Theory?
7. What is margin trading?
8. Enlist the steps of Portfolio management process.
9. What is the beta of market?
10. What is the base year for computing SENSEX?

## Q. 2 Answer the following questions.

A).Distinguish between Investment, Speculation and Gambling.
B).Explain Markowitz Theory of Optimal Portfolio Selection?

## Q. 3 Answer the following questions.

A).What are the different forms of Market Efficiency?
B). What is fundamental analysis and what are the major components of the same
Q. 4 Attempt any two questions. (Each of 7.5 mark)

1. Consider the two assets A and B for which returns (\%) under different conditions of economy are given as below. Find the expected return and risk (as measured by standard deviation of return) of each asset.

| Condition of <br> Economy | Probability | Stock A (\%) | Stock B(\%) |
| :--- | :--- | :--- | :--- |
| Recession | 0.10 | -18 | -10 |
| Below avg. | 0.20 | -4 | 2 |
| Average | 0.40 | 12 | 8 |
| Above avg | 0.20 | 24 | 12 |
| Boom | 0.10 | 30 | 18 |

2. You are presented by a new, feisty client with the following: " I have lived through many a time you will never see, you young whippersnapper, and if there is one thing I have learned, it's that anyone can have luck now and then. But MANAGEMENT! Now that's the key to real success. I have selected two assets for you to assess, my young manager, and I will take the risky one or the non risky, makes no matter. But MANAGEMENT! Find me the one that there's some real talent behind and you will have the entire clan's account next week!" You take the paper he hands you, and read the names of the two funds.
Doing research into the wee hours of the night, you find that fund A has a sample mean return of $13 \%$ and fund B has a sample mean return of $18 \%$, with the riskier fund $B$ having double the beta at 2 as a fund A . The respective standard deviations are $15 \%$ and $19 \%$. The mean return for your market index is $12 \%$ with a standard deviation of $8 \%$, while the risk free rate on the bond market is $8 \%$. Compute Sharpe's and Treynor's Index for the fund and market. Interpret the results.
3. The following information is available:

|  | Stock A | Stock B |
| :--- | :--- | :--- |
| Expected return | $16 \%$ | $12 \%$ |
| Standard deviation | $15 \%$ | $8 \%$ |

The coefficient of correlation is 0.60
a) What is the covariance between Stock A and Stock 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 ?
4. Mr.Verma is considering investing in a bond currently selling for Rs. 8785.07. The bond has four years to maturity, a Rs. 10,000 face value and a 8 percent coupon rate. The next annual interest payment is due one year from today. The approximate discount factor for investments of similar risk is 10 percent.
a) Calculate the intrinsic value of the bond. Based on this calculation, should Verma purchase the bond?
b) Calculate the YTM of the bond. Based on this calculation, should Verma purchase the bond?

