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# GUJARAT TECHNOLOGICAL UNIVERSITY <br> MBA - SEMESTER 3 - EXAMINATION - WINTER 2016 

Subject Code: 2830203
Date: 05/01/2017
Subject Name: Security Analysis \& Portfolio Management (SAPM)
Time: 02.30 PM TO 05.30 PM Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
Q. No.
Q. 1 (a) In a well-diversified portfolio
A. Market risk is
B. Systematic risk is negligible. negligible.
C. Unsystematic risk is
D. Non diversifiable risk is negligible. negligible.

According to the CAPM, the risk premium an investor expects to receive on any stock or portfolio increases.
A. Directly with alpha.
B. Inversely with alpha.
C. Directly with beta.
D Inversely with beta.

An underpriced security will plot
A. On the Security B. Below the Security Market Line.
C. Above the Security
D. Eitherabove or below the Security Market

Line depending on its covariance with the market.
The capital asset pricing model assumes
A. All investors are
B. All investors have the same holding price takers. period.
4.
C. Investors pay taxes
D. Both A and B are true. on capital gains.
The risk free rate is 5 percent. The expected market rate of return is 11 percent. If you expect stock X with a beta of 2.1 to offer a rate of return of 15 percent, you should
5.
A. Buy stock X because it is overpriced.
C. Sell stock short X because it is underpriced.
B. Sell short stock X because it is overpriced.
D. Buy stock X because it is underpriced.

The highly liquid security is
A. Mutual fund units
B. Treasury bills
6.
C. Shares
D. Commercial papers

## Q. 1 (b) Define:

1) Market Order
2) Closed Ended Schemes


4) Treynor Ratio

Q. 1 (c) Explain : Function of Indian Stock Market

Q. 2 (a) Discuss the major types of continuation and reversal patterns with
reference to technical analysis
(b) Write a Short note on Capital Asset Pricing Model.

## OR

(b) What is Duration? Explain the eight rules of Duration
Q. 3 (a) Define and Differentiate Technical analysis from Fundamental analysis.
(b) What are the principles of bond duration? Explain in detail.

OR
Q. 3 (a) What is the purpose of financial statement analysis (FSA) and what $\mathbf{0 7}$
(b) Rs 1,000,000 par six-year maturity bond with an 8 percent coupon rate07 (paid annually) currently sells at a yield to maturity of 7 percent. A portfolio manager wants to forecast the total return on the bond over the coming four years, as his horizon is four years. He believes that four years from now, two-year maturity bonds will sell at a yield of 5 percent and the coupon income can be reinvested in short-term securities over the next three years at a rate of 5 percent. What is the expected annualized rate of return over the four year period?
Q. 4 (a) What is the difference between Capital Market Line and Securities Market 07 Line?
(b) Discuss the Relationship between Diversification and Portfolio Risk?

OR
Q. 4 (a) What is Macroeconomic Analysis? Discuss any three variables / indicators used to describe the state of economy.
(b) Rs. 1000 par value bond with annual coupon of $10 \%$ has a remaining maturity of 4 years. The bond is presently selling for Rs.1020. The reinvestment rate applicable to the future cash inflows of the bond is $9 \%$ p.a. What will be the realized YTM?
 stock might sell for at the end of the year with the respective probabilities

| Price $(\mathrm{Rs})$ | Probability |
| :--- | :--- |
| 115 | 0.1 |
| 120 | 0.1 |
| 125 | 0.2 |
| 130 | 0.3 |
| 135 | 0.2 |
| 140 | 0.1 |

I. Calculate the expected return
II. Calculate the standard deviation of returns.

OR
Q. 5 Monthly return data (in per cent) for ONGC stock the NSE index for a 12 month period are presented below:

| Month | ONGC | NES <br> index |
| :---: | :---: | :---: |
| 1 | -0.75 | -0.35 |
| 2 | 5.45 | -0.49 |
| 3 | -3.05 | -1.03 |
| 4 | 3.41 | 1.64 |
| 5 | 9.13 | 6.67 |
| 6 | 2.36 | 1.13 |
| 7 | -0.42 | 0.72 |
| 8 | 5.51 | 0.84 |
| 9 | 6.80 | 4.05 |
| 10 | 2.60 | 1.21 |
| 11 | -3.81 | 0.29 |
| 12 | -1.91 | -1.96 |

I. Calculate alpha and beta for the ONGC stock.
II. Suppose NSE index is expected to move up by 15 per cent next month. How much would you expect form ONGC?

