Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS / MBA (OLD) / SEM-3 FT & 5 PT / FM-303 / 2010-11

2010-11

SECURITY ANALYSIS & PORTFOLIO MANAGEMENT

Time Allotted : 3 Hours   *Full Marks* : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words

as far as practicable.

GROUP – A

### (Multiple Choice Type Questions)

1.   Choose the correct alternatives for any *ten* of the following :

$$10 \times 1 = 10$$

   i)   Which of the following is a source of systematic risk for

         a company ?

         a)   Falling margins due to rising operational costs

         b)   Labour problem in the factory

         c)   Sectoral slowdown due to cheaper imports

         d)   Reduction in interest rates due to a cut in the CRR

               by RBI.

16530   [Turn over]

ii) A portfolio with two stocks which are perfectly negatively correlated ensures

 a) high risk and high returns

 b) low risk and low returns

 c) low risk without sacrificing returns

 d) high risk with low returns.

iii) Which of the following statements is true ?

 a) Slope of SML is known as beta

 b) Slope of CML is known as beta

 c) CML is a relationship between total risk and required return

 d) SML is a relationship between beta and market return.

iv) Under which of the following version of Efficient Market Hypothesis, point and figure charts are effective in beating the market ?

 a) Weak b) Semi Strong

 c) Strong Form d) None of these.
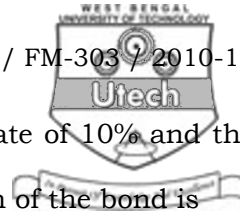
v) A perpetual bond carries a coupon rate of 10% and the yield to maturity is 10%. The duration of the bond is

    a) 11 years   b) 9 years

    c) 10 years   d) 12 years.

vi) Bond Immunization strategy under Bond Portfolio Management is a/an

    a) Passive Strategy

    b) Semi-Active Strategy

    c) Active Strategy

    d) Buy and Hold Strategy.

vii) A purely passive strategy

    a) uses only index funds

    b) uses weights that change in response to market conditions

    c) uses only risk-free assets

    d) is best if there is 'noise' in realized returns.

viii) Which of the following is true ?

    a)   Overpriced securities plot above SML

    b)   Underpriced securities plot on the SML

    c)   Properly priced securities plot on the SML

    d)   Overpriced securities are above the efficiency frontier.

ix)   If the required return of a security is greater than the expected return then

    a)   security is underpriced

    b)   security is overpriced

    c)   security is highly risky

    d)   security is less risky.

x)   If the Beta of Infotech Company stock is 1·37 and standard deviation of its stock return is 32·2%. The standard deviation of market portfolio is 25%. Calculate the amount of systematic risk in the stock.

    a)   1173·3% ^{2} b)   1852·52% ^{2}

    c)   2552·23% ^{2} d)   2652·23% ^{2}.

xi) A manager who uses the mean-variance theory to construct an optimal portfolio will satisfy

   a) investors with low risk-aversion coefficients

   b) investors with high risk-aversion coefficients

   c) investors with moderate risk-aversion coefficients

   d) all investors, regardless of their level of risk aversion.

xii) Ideally, clients would like to invest with the portfolio manager who has

   a) a moderate personal risk-aversion coefficient

   b) a low personal risk-aversion coefficient

   c) the highest Sharpe measure

   d) the highest record of realized returns.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.   3 × 5 = 15

2. Distinguish between Fundamental Analysis and Technical Analysis.

3. Compare between CAPM and APT.
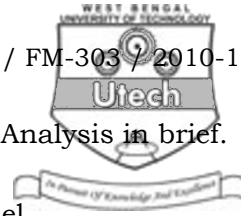
4. State "Dow's theory" as a tool of Technical Analysis in brief.

5. Discuss in brief Sharpe's Single Index Model.

6. Outline any *two* Bond Portfolio Strategies in brief.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. a) A company paid a dividend of Rs. 2.75 during the current year. It is forecasted that the dividend & earning to grow at 8% over the next 5 years & 5% thereafter infinitely. Required rate of return of investors is 20%. What is the present value of the stock ?   5

   b) Mr. P is considering the purchase of a bond currently selling at Rs. 878.50. The bond has four years to maturity, face value of Rs. 1,000 and 8% coupon rate. The next annual interest payment is due after one year from today. The required rate of return is 10%.

   i)   Calculate the intrinsic value (Present value) of the bond. Should Mr. P buy the bond ?

   ii) Calculate the yield to maturity of the bond.   5 + 5

8. Discuss with examples the application of Markowiz Portfolio Theory with its basic assumption. State the criticism labeled against this theory.

9. Mr. *A* is considering the purchase of three securities *A, B* and C for the next year. The returns of the securities depend on next year's state of the stock market. The estimated rates of return are shown in the table.

State of Market	Probability of Occurrence	Rates of Return of Securities		
		A	B	C
Recession	0·25	10%	9%	14%
Average	0·50	14%	13%	13%
Boom	0·25	16%	18%	10%

Find expected return and risk of the portfolio assuming Mr. *A* will invest one-third on each security.

10. Write short notes on any *three* of the following : 3 × 5

a) Dow Theory

b) Price Charts

c) Capital Market Line

d) Arbitrage Pricing Theory

e) International Diversification.

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