

**Code No: 763AG**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**MBA III Semester Examinations, February - 2024**

**SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**

**Time: 3 Hours**

**Max.Marks:75**

- Note:** i) Question paper consists of Part A, Part B.  
 ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.  
 iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART - A**

**(25 Marks)**

- 1.a) Explain what you understand by the following terms in securities trading:  
 i) Buying on margin ii)Margin iii)Maintenance margin iv)Short sale. [5]  
 b) i) Explain what is an investment portfolio with the help of an example.  
 ii) Mention and explain briefly any three tools available for portfolio analysis. [5]  
 c) Explain briefly: i) Bond volatility ii) Bond convexity. [5]  
 d) Explain the Earnings multiplier approach taking your own example. [5]  
 e) Compare and contrast Futures and Forward contracts. [5]

**PART – B**

**(50 Marks)**

2. Discuss the investment channels available to individuals in India. Compare them on the basis of their investment objectives. [10]

**OR**

- 3.a) Bring out the differences between investment and speculation.  
 b) What are the advantages and disadvantages of top-down versus bottom-up investing styles? [5+5]

- 4.a) Distinguish between unique risk and market risk.  
 b) Find the Beta of the portfolio: [5+5]

Stocks	S1	S2	S3	S4	S5
Market value(Rs.)	1,50,000	2,50,000	2,00,000	2,50,000	1,50,000
Beta( $\beta_i$ )	1.1	1.6	0.8	1.2	2.0

**OR**

- 5.a) What is an efficient portfolio? Explain briefly risk free lending and borrowing.  
 b) The following information is available on two stocks X and Y.

Particulars	Stock X	Stock Y
Expected return	16%	12%
Standard deviation	15%	8%
Coefficient of correlation		0.60

What is the covariance between stocks X and Y?

Calculate the expected return and risk of a portfolio in which A and B have weights of 0.60 and 0.40.

**[5+5]**

6.a) Explain the basic bond valuation. What is the relationship between coupon rate, required yield and price?

b) The market value of a Rs. 1,000 par value bond, carrying a coupon rate of 12 percent and maturing after 7 years is Rs. 750. What is the yield to maturity on this bond? [5+5]

**OR**

7.a) Find the duration of a 6% coupon bond making annual coupon payments if it has 3 years until maturity and has a yield to maturity of 6%. What is the duration if the yield to maturity is 10%?

b) You are managing a portfolio of Rs 1 million. Your target duration is 10 years and you can choose from two bonds: a zero-coupon bond with maturity of 5 years and perpetuity each currently yielding 5%.

i) How much of each bond will you hold in your portfolio?

ii) How will these fractions change *next year* if target duration is now 9 years? [4+6]

8.a) Describe the key economic variables that an investor must monitor as part of his Fundamental Analysis.

b) Distinguish among the three versions of Efficient market hypotheses (EMH) and discuss its implications to Fundamental and Technical analyses. [5+5]

**OR**

9.a) Write short note on P/E, P/BV and P/S ratios based technique of relative valuation.

b) What is PEG ratio? How is it calculated? What does it tell us? [5+5]

10.a) Present an overview of the Indian Derivatives Market.

b) i) Compute the value of the Call option under the following circumstances:

Stock price = 100

Exercise price = 0.95

Interest rate = 10% per year

Time to expiration = 0.25 (3 months or one quarter of a year)

Standard deviation  $\sigma = 0.50$  (50% per year).

ii) Recalculate the value of the above call option using a standard deviation of 0.60 and confirm the option is worth more using the higher stock-return volatility. [5+5]

**OR**

11.a) Explain the contemporary trends in Indian Mutual Funds.

b) Ratan is comparing between two mutual funds, X and Y. X is an equity fund, while Y is a fixed-income fund. The rate of return of X is 12%, and that of Y is 7%. Additionally, Y's beta is 0.5, and X's is 1.2. Assume the risk-free rate of return is 2%. Using Treynor ratio decide in which mutual fund should he invest?

c) What are the limitations of Treynor ratio? [3+4+3]

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