Subject Name: Security Analysis and Portfoilio Management

Subject Code: 4539221

Instructions:

Time: 02:30 PM TO 05:30 PM

GUJARAT TECHNOLOGICAL UNIVERSITY MBA – SEMESTER –III-EXAMINATION – SUMMER-2022

Date: 15-07-2022

Total Marks: 70

1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. Q.1 **Explain the Following Concept** 14 1. HPR 2. Portfolio Revision 3. Limit Order 4. Impulse Wave 5. Yield to Maturity 6. CML 7. Arbitrage Pricing Theory (a) What do you mean by Risk? Explain Systematic and Non Systematic Risk. Q.207 What do you understand by efficient market hypothesis? Briefly explain its 07 different forms of efficiency. OR The probability distribution of the rate of return on a stock is given below: 07 State of the Economy Probability of Occurrence Return Boom 10% 0.20 Normal 0.40 18 % 0.40 12 % Recession What is the standard deviation of return? Q.3Explain the contribution of Charles H. Dow in the field of technical analysis. 07 As an investor, you are considering two stocks with the following 07 characteristics: E(R1) = 12% E(R2) = 22% $\sigma 1 = 11\% \ \sigma 2 = 21\%$ W1 = 0.4 W2 = 0.6Coefficient of correlation 0.60 (a) What is the covariance between two stocks 1 and 2? (b) What is the expected return and risk of a portfolio. OR Explain what do you understand by Industry Life Cycle? Briefly discuss its 07 different phases with their important features.

- (b) Sandhya Ltd. Has furnished the following details to you as an investor.

 Risk Free Rate = 5%

 Return on Asset = 18%

 Beta = 1.1

 Calculate what Expected Return is for Market Portfolio.
- Q.4 (a) Explain Capital Asset Pricing Model and also state its Major Assumptions. 07
 - (b) What are the principles of bond duration? Explain in detail.

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- Q.4 (a) Write a short note on Markowitz Model- Efficient Frontier.
 - (b) The market value of Rs. 1000 par value bond, carrying coupon rate of 14 percent and maturing after 5 years, is Rs 1050. What is the yield to maturity on this bond?
- Q.5 You were invested in three mutual funds schemes namely P,Q and R, and the Mean return, standard deviation, Beta of the schemes and the return on the market are provided to you. The mean risk-free rate was 7 percent.

| Particular | Mean return (%) | Standard Beta |
|--------------|-----------------|---------------|
| | | Deviation (%) |
| P | 18 | 23 1.7 |
| Q | 15 | 14 0.7 |
| R | 21 | 18 1.5 |
| Market Index | 16 | 17 1 |

You are required to calculate the Sharpe measure, Treynor measure and Jensen measure. Rate the schemes based on Sharpe, Treynor and Jensen.

OR

Q.5 A stock costing Rs. 120 pays no dividends. The possible prices that the stock might sell for at the end of the year with the respective probabilities.

| Price(Rs) | Probability |
|-----------|-------------|
| 115 | 0.1 |
| 120 | 0.1 |
| 125 | 0.2 |
| 130 | 0.3 |
| 135 | 0.2 |
| 140 | 0.1 |

Calculate the expected return and standard deviation of returns.
