## SCHOOL OF MANAGEMENT <br> END TERM EXAMINATION - JAN 2024

Semester: Semester III-2022
Course Code : MBA3005
Course Name :Investment Management
Program : MBA
Date : 17-JAN-2024
Time : 10:00AM - 1:00 PM
Max Marks : 100
Weightage : 50\%

## Instructions:

(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

## PART A

## ANSWER ALL THE QUESTIONS

$10 \mathrm{X} \mathrm{3M}=30 \mathrm{M}$

1. You have a sum of money that you won't need for the next 10 years. Would you be more inclined to invest it in long-term stable assets or explore more speculative opportunities? Explain your reasoning based on the concept of time horizon in investing and speculation.
(CO1) [Knowledge]
2. What does the beta coefficient measure, and how is it useful in assessing the historical risk of an individual stock in relation to the overall market?
(CO2) [Knowledge]
3. How does diversification reduce portfolio risk. Provide a scenario where adding a new asset to a portfolio decreases the overall risk of the portfolio.
(CO2) [Knowledge]
4. The Edward Corporation recently paid a dividend of $\$ 4$ per share. Dividends have been growing at an annual rate of $8 \%$ and its growth rate is expected to continue in the foreseeable future. If the required rate of return for Edward's stock is $14 \%$, What is the value of stock?
(CO3) [Knowledge]
5. Jim Evans is considering purchasing the common stock of the Alpine Corporation. Alpine's Current Market price is $\$ 50$ per share. According to Jim's analysis, Alpine has a present value of $\$ 55$ per share. What should Jim do?
(CO3) [Knowledge]
6. As an investor, you are considering purchasing corporate bonds from two companies-one with a high credit rating and another with a lower credit rating. Discuss the potential advantages and risks associated with each choice and how the credit rating impact on the yield and marketability of these bonds?
(CO3) [Knowledge]
7. 

Assume that you are an investment advisor who has instructed one of your clients to invest their $\$ 100000$ in U.S Treasury notes due to mature in 2 years. If your client becomes worried that if increase in the level of interest rates will reduce the market value of his bond portfolio, what should you say to allay your client's fears?
(CO3) [Knowledge]
8. Assume Risk free rate is $9 \%$ and Market return is $15 \%$. The expected returns and betas are given below for three stocks.
Stock Expected Return\% Expected beta

| H | 14 | 1.20 |
| :--- | :--- | :--- |
| $\mathbf{l}$ | 15 | 0.75 |
| $J$ | 20 | 1.50 |

Which stock(s) are undervalued? Overvalued?
(CO2) [Knowledge]
9. The Evan company is expecting earnings per share to be $\$ 5$ for next year. If earnings have been growing at a rate of 8 percent for a year in the past and this growth is expected to continue in the future, determine the current required rate of return for this company's stock. Assume a dividend payout of 60 percent and a current stock price is $\$ 65$.
(CO3) [Knowledge]
10. How can traders interpret candlestick patterns to forecast price movements?
(CO4) [Knowledge]

## PART B

## ANSWER ALL THE QUESTIONS

$$
6 \times 7 M=42 M
$$

11. Traders use Technical Charts in very many ways and one of them is to identify the Chart Patterns and trade based on it. The Technical Chart of M/s Mold-Tek Pack Equity Share is given below. Considering this Chart, you are required to
12. Identify the Chart Pattern
13. Explain the identified Pattern and its implications on the direction of price movement.

14. 15. The returns on securities 1 and 2 under five possible states of nature are given below:

| State of <br> nature | Prob. | Return on SBI (in <br> $\%$ ) | Return on HDFC (in <br> $\%)$ |
| :--- | :--- | :--- | :--- |
| 1 | 0.1 | -10 | 5 |
| 2 | 0.3 | 15 | 12 |
| 3 | 0.3 | 18 | 19 |
| 4 | 0.2 | 22 | 15 |
| 5 | 0.1 | 27 | 12 |

Compute: (a) Expected return on securities. (b) Covariance between the returns on securities.
(CO2) [Comprehension]
13. (a) AT Ltd. paid dividend per share of Rs. 3.56 during the recently ended financial year, and dividend is expected to grow at $5.5 \%$ a year forever. The covariance of the stock returns with that of the market is 169 and the variance of the returns from the market is 187 . The return on the market index is $12 \%$, and the risk-free rate of interest is $6.25 \%$. Compute the intrinsic value of the share. ( 5 marks)
(b) Explain any three parameters used for relative valuation of share (2 marks)
(CO3) [Comprehension]
14. (a) The equity stock of Rax Limited is currently selling for Rs. 30 per share. The dividend expected next year is Rs.2.00. The investors required rate of return on this stock is 15 percent. If the constant growth model applies to Rax Limited, what is the expected growth rate? (4 marks)
(b) What are the determinants of the PBV ratio and PS ratio?
(CO3) [Comprehension]
15. (a) The risk-free rate is 8 percent and the expected return on the market portfolio is 14 percent. The beta of stock $Q$ is 1.25 . Investors believe that the stock will provide an expected return of 17 percent. Compute the alpha of the stock. (4 marks)
(b) Explain any three factors which influences the market risk premium? (3 marks)
(CO2) [Comprehension]
16. The following information is available:

Expected return for the market $=14 \%$.
Standard deviation of market return $=20 \%$.
Risk-free return = 6\%.
Correlation coefficient between stock $A$ and the market $=0.7$.
Correlation coefficient between stock $B$ and the market $=0.8$.
Standard deviation for stock $A=24 \%$.
Standard deviation for stock $B=32 \%$.
(a) Calculate the beta for stock A and stock B. (4 marks)
(b) Calculate the required return for each stock. (3 marks)
(CO2) [Comprehension]

## PART C

17. Ms Zoya is new to investing and wants to invest in Bonds / Debentures for a period of 5 years. Ms Zoya's Personal Banker has recommended the following two bonds for investment, the details of which are given below:
SI. No. Particulars
16 Year Muthoot Finance Debenture with a Annual Coupon of $8 \%$ currently trading in the market for ₹ 954 with a Face Value of ₹1000

26 Year India Bulls Housing Zero Coupon Debenture with a Principal Value of Rs 1000 paying interest @ 8\% pa compounded annually and trading in the market currently at ₹ 1024

Ms Zoya has recently read about Duration of a Bond and wants to invest in only ONE of the above Debentures whichever has a lower price variability. As a Investment expert, you are required to:

1. Compute the Duration of both these Debentures
2. Indicate the price variability of these Debentures for one percentage change in Interest Rate
3. Suggest to Ms Zoya as to which of these Debenture should she invest, considering her investment objective
(CO3) [Application]
4. You are employed as a Financial Analyst with M/s Morgan Stanley. You are assigned the task of computing the Intrinsic Value per Equity Share of M/s Chaya Agro Ltd. The data that is provided to you is as follows:

| Particulars |  |
| :--- | :--- |
| Paid up Equity Share Capital | $₹ 300$ Lacs |
| Face Value per Share | $₹ 10$ |
| Profit after Tax for the Year ended 31st March $₹ 800$ Lacs <br> 2023 $40 \%$ <br> Dividend Payout Ratio $25 \%$ <br> Return on Equity (ROE) 1.35 <br> Beta of the Company $7.5 \%$ pa <br> Risk Free Rate of Return $18 \%$ pa <br> Market Rate of Return $₹ 240$$\$$. |  |

Considering the above information, you are required to

1. Compute the Intrinsic Value per Equity Share
2. Comment on whether this Share is Overpriced or Underpriced
