18MBAFM302
USN


Third Semester MBA Degree Examination, Jan./Feb. 2021 Investment Management

Time: 3 hrs .
Max. Marks: 100

Note: 1. Answer any FOUR full questions from Q.No. 1 to 7.
2. Q. No. 8 is compulsory.
3. Use of P.V. tables are permitted.

1 a. What does $\beta=+2.0$ indicate?
(03 Marks)
b. Explain the various stages of Investment Process in detail.
(07 Marks)
c. On the basis of the following data given below, calculate i) Beta ( $\beta$ ) and ii) Alpha ( $\alpha$ ).

| Day | NasdaQ points | Microsoft rate |
| :---: | :---: | :---: |
| 1 | 904.95 | 597.80 |
| 2 | 845.75 | 570.80 |
| 3 | 874.25 | 582.95 |
| 4 | 847.95 | 559.85 |
| 5 | 849.10 | 554.60 |
| 6 | 835.80 | 545.10 |
| 7 | 816.75 | 519.15 |
| 8 | 843.55 | 560.70 |
| 9 | 835.55 | 560.95 |
| 10 | 839.50 | 597.40 |

2 a. What is a Fund of Funds (FoF)?
b. What is Risk? Explain the different types of systematic and unsystematic risks.
(07 Marks)
c. Stocks L \& M have yielded the following returns for the past two years :

| Years | Return \% |  |
| :---: | :---: | :---: |
|  | L | M |
| 2011 | 12 | 14 |
| 2012 | 18 | 12 |

Calculate :
i) What is the expected return on a port folio made up of $60 \%$ of L and $40 \%$ of M ?
ii) Find out the standard deviation of each stock.
iii) What is the Covariance and Co-efficient of correlation between stocks L and M?
iv) What is the port folio risk of a port folio made up of $60 \%$ of L and $40 \%$ of M ?

3 a. What is Markowitz efficient frontier?
b. Explain the various levels of information and the forms of markets according to Efficient Market Hypothesis (EMH).
(07 Marks)
c. The following 3 port folios provide the particulars given below, the risk free rate of interest is $9 \%$. With the help of the given data :
i) Rank these port folios using Sharpe's and Treynor's methods.
ii) Compare both the indices.

| Port folio | Average Annual <br> return | Standard deviation | Correlation co-efficient <br> (Market \& Port folio) |
| :---: | :---: | :---: | :---: |
| A | 18 | 27 | 0.8 |
| B | 14 | 18 | 0.6 |
| C | 15 | 08 | 0.9 |
| Market | 13 | 12 |  |

(10 Marks)
4 a. What is Technical Analysis?
b. Explain the DoW theory with reference to the hypotheses and various trends. (07 Marks)
c. Calculate the duration for Bond A and Bond B with $7 \%$ and $8 \%$ coupons, having a maturity period of 4 years. The face value is Rs 1000/-. Both the bonds currently yield $6 \%$. ( 10 Marks)

5 a. What is the formula used for Characteristic Regression Line (CRL) model?
(03 Marks)
b. Explain the various Bond Portfolio Management Strategies.
c. VRW \& Co has common shares outstanding in the market with price earnings ratio of 15 . The annual expected growth in earnings, dividends and price is $7 \%$. The earnings per share is Rs 2.5 , the dividend payout is $60 \%$ and the investor wants to hold the stock for 4 years. The required rate of return is $15 \%$. What would be the present value?
(10 Marks)
6 a. Mention the formula for port folio standard - deviation according to Markowitz model.
(03 Marks)
b. Explain in detail, the various types of Mutual funds based on various parameters. (07 Marks)
c. Assume you are a Portfolio Manager, based on the following details, determine the securities that are overpriced and those that are underpriced in terms of the SML.

| Security | Actual return | $\beta$ | $\sigma$ |
| :---: | :---: | :---: | :---: |
| A | 0.33 | 1.7 | 0.50 |
| B | 0.13 | 1.4 | 0.35 |
| C | 0.26 | 1.1 | 0.40 |
| D | 0.12 | 0.95 | 0.24 |
| E | 0.21 | 1.05 | 0.28 |
| F | 0.14 | 0.70 | 0.18 |
| Nifty index | 0.13 | 1.00 | 0.20 |
| T - bills | 0.09 | 0 | 0 |

(10 Marks)
7 a. Mention the formula for Basic Jensen's Performance Index.
(03 Marks)
b. Explain any 4 chart patterns in Technical Analysis of Securities.
(07 Marks)
c. The PMW Investment Company manages a stock fund consisting of 4 stocks with the following market values and betas : If the risk - free rate of interest is $8 \%$ and the market return is $15 \%$, what is the port folio's expected return?
(10 Marks)

| Stock | Market value in (Rs) | Beta |
| :---: | :---: | :---: |
| Bell | $2,00,000$ | 1.16 |
| Sell | $1,00,000$ | 1.20 |
| Grill | $1,50,000$ | 0.80 |
| Shrill | 50,000 | 0.50 |

## 8 CASE STUDY [Compulsory] :



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Assume you are an Investment Manager, you need to guide Mr. MVW, based on the following details :
The expected return of the market is $15 \%$, the equity's beat is 1.2 and the risk - free rate of interest is $8 \%$, further the following Macro economic factors were also observed.

| Factor | Market Price of risk (\%) | Sensitivity Index |
| :--- | :---: | :---: |
| Inflation | 6 | 1.1 |
| Industrial Production | 2 | 0.8 |
| Risk Premium | 3 | 1.0 |
| Interest rate | 4 | -0.9 |

The guidance to Mr. MVW should be in terms of
a. Assumptions of CAPM.
(06 Marks)
b. Return of the stock using CAPM.
c. Return of the stock using APT model.
d. Explanation for the difference of return based on CAPM as compared to APT model.
(02 Marks)

