Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

## CBCS SCHEME

USN

**18MBAFM302** 

## 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

(10 Marks)

2 a. What is a Fund of Funds (FoF)?

(03 Marks)

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?

(10 Marks)

3 a. What is Markowitz efficient frontier?

(03 Marks)

- Explain the various levels of information and the forms of markets according to Efficient Market Hypothesis (EMH).
- 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.

-	mpare com maners.							
	Port folio	Average Annual	Standard deviation	Correlation co-efficient				
		return	13.7 ×	(Market & Port folio)				
	A	. 18	27	0.8				
	В	14	18	0.6				
	С	15	08	0.9				
	Market	13	12	4				

(10 Marks)

4 a. What is Technical Analysis?

(03 Marks)

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.

(07 Marks)

- 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.
  - 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	β	σ		
A	0.33	1.7	0.50		
В	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		
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(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)

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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 <u>CASE STUDY</u> [Compulsory]:

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		7	0.8
Risk Premium	v	3	ø	7	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.

(06 Marks)

c. Return of the stock using APT model.

(06 Marks)

d. Explanation for the difference of return based on CAPM as compared to APT model.

(02 Marks)