## 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

## Third Semester MBA Degree Examination, Dec.2018/Jan.2019 Investment Management

Time: 3 hrs.

Max. Marks:80

Note: 1. Answer any Four questions from Q.No. 1 to Q.No. 7. 2. Question No. 8 is compulsory.

1 a. What is NAV?

(02 Marks)

- b. Unsystematic risk can be minimized, systematic risk can be managed. Discuss. (06 Marks)
- c. For the data given below prepare price weighted, equally weighted and value weighted indices.

  (08 Marks)

Strip	Price at the end of base	Price at the end of	No. of outstanding			
	year	year t	shares			
A	54	60	1,00,000			
В	60	64	1,50,000			
C	65	72	2,00,000			

2 a. What is RSI?

(02 Marks)

b. Distinguish Investment and Speculation.

(06 Marks)

c. The probability distribution of the rate of return on Bharath stock is given below:

State of the Economy	Probability	Rate of Return (%)
Boom	0.30	16
Normal	0.50	11
Recession	0.20	6

What is the Standard deviation of return?

(08 Marks)

3 a. What is YTM?

(02 Marks)

b. Explain the ways in which a company may rise equity capital in the primary market.

(06 Marks)

- c. The following information is available on a bond : Face value : Rs 100 ;
  Coupon rate : 12% p.a. ; Years to maturity : 6 yrs ; Current market price : Rs 110.
  What is the duration of the bond? Use the approximate YTM. (08 Marks)
- 4 a. Write any two assumptions of CAPM theory.

(02 Marks)

b. Discuss the factors to be considered in Industrial analysis.

(06 Marks)

c. The closing value of sensex is given below:

Day	Closing sensex value
1	2795.30
2	2754.95
3	2788.97
4	2812.90
5	2765.37

Calculate Relative strength index of the sensex at the end of day 5.

(08 Marks)

5 a. Brief the market trends according to DOW theory.

(02 Marks)

b. What are the three forms of market efficiency and how they are tested?

(06 Marks)

c. Consider the following information for three mutual funds: A, B and C and the market.

<u> </u>	Mean return (%)	Standard deviation (%)	Beta
A	12	18	1.1
В	10	15	0.9
С	13	20	1.2
Market Index	1.1	17	1.00

The mean risk – free rate was 6 percent. Calculate the Treynor measure, Sharpe measure and Jensen measure for the three mutual funds and the market index. (08 Marks)

6 a. What is duration of the bond?

(02 Marks)

b. A portfolio consists of 3 securities 1, 2, and 3. The proportions of these securities are :  $W_1=0.3$ ,  $W_2=0.5$  and  $W_3=0.2$ . The standard deviations of return of these securities (in percentage terms) are :  $\sigma_1=6$ ,  $\sigma_2=9$  and  $\sigma_3=10$ . The correlation co-efficient among security returns are  $\rho_{12}=0.4$ ,  $\rho_{13}=0.6$ ,  $\rho_{23}=0.7$ . What is standard deviation of portfolio return?

c. The rates of return on stock A and market portfolio for 15 periods are given below:

The rates	OLICE	ulli Ol	11 Stoc	n 11 u	ila illa	INCU	JOILIO	110 10	10 0	OI IO G	J CLI O E	5-10	001011	•	
Period	41	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Return	10	15	18	14	16	16	18	4	-9	14	15	14	6	7	-8
on stock (%) A	7					p*			4	, e					
Return	12	14	13	10	9	13	14	7	1	12	-11	16	8	7	10
on				1				<b>(</b> A)			A				
market			A								9-30-	7			
portfolio			1	7				3							
(%)			V			4	9				فا				

What is Beta of stock A?

(08 Marks)

- a. X companies next year dividend per share is expected to be 3.50 Rs with a subsequent growth rate of 10% per year. If the required rate of return is 15% per year. What should be its price?

  (02 Marks)
  - b. The current dividend on an equity share of ABC Limited is Rs 3.00. The present growth rate is 50 percent. What is the intrinsic value per share of ABC Limited. If investors require a return of 16 percent? (06 Marks)
  - c. Explain the role of SEBI in regulating Indian Capital Market.

(08 Marks)

(16 Marks)

8 The returns of two assets under four possible states of nature are given below:

State of Nature	Probability	Return on asset 1	Return on asset 2
1	0.10	5%	0%
2	0.30	10%	8%
3	0.50	15%	18%
4	0.10	20%	26%

- a. What is the Standard deviation of the return on asset 1 and asset 2?
- b. What is Covariance between the return on assets 1 and asset 2?
- c. What is the co-efficient of correlation between the returns on assets 1 and 2?