(2 ½ Hours) **Total Marks: 75** 

NB: (1) **All** questions are **compulsory**.

- (2) All working notes should form a part of your answer.
- (3) Specify **assumptions**, if any, while **solving** the questions.
- (4) **Figures** to the **right** indicate **full** marks.

## (1)(a) Match the following. (Any 8)

(8)

	Column A		Column B
1	Standard deviation	A	Mutual funds
2	Strong form	B	Jensen's measure
3	Tax saving investments	S. C.	Highly rigid
4	CAPM	D	Sharpe's measure
5	Formula plans	S.E.S	Hybrid approach
6	Core-satellite asset allocation	F	Inflation risk
7	Purchasing power risk	$\mathbf{G}$	Average life
8	Duration of bond	H	Inside information
9	Economic investment		Reduces risk and maximize returns
10	Objective of portfolio management	100	Addition to capital stock

- (1) (b) State whether following statements are True or False. (Any 7) (7)
- **1.** All investments are speculative in nature.
- 2. Money- weighted return is also termed as internal rate of return.
- **3.** The risk of an issuer going bankrupt is termed as default risk.
- 4. Higher the variance of a security, higher is its total risk.
- **5.** Inflation risk is a type of unsystematic risk.
- 6. Modern portfolio theory is based on the assumption that market is inefficient.
- 7. Holding period return and annualized return are always the same.
- 8. Investment in schemes of post office such as NSS, NSC gives tax benefits.
- **9.** Difference between highest and the lowest value is termed as range.
- **10.** Index funds and exchange traded funds are good investment types for tactical asset allocation.

(2) The rate of return on stock A and stock B under different state of economy are given below: (15)

State of Economy	Probability	Stock A (%)	Stock B (%)
Boom	0.3	20	40
Normal	0.5	3000	30
Recession	0.2	\$\cappa \cappa \	20 70 8

Calculate the expected return and standard deviation of return on stock A and stock B. Which stock is a better investment option? and why?

## OR

- (2) (a) Define portfolio management? Explain the objectives of portfolio management. (8)
  - (b) Discuss active portfolio management strategies in detail (7)
- (3) Calculate Beta in case of share of Nelco Ltd. whose returns and market portfolio returns are given below: (15)

Year	Nelco Ltd.	Market Portfolio Returns
	20	14
2788	24	19
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	10	9
4	15	14
	(-) 10	(-) 8
60000	12	10
	18	16
8 7 7 7	28	30
	33	35
10	40	42

OR

(8)

**(15)** 

(3)(a) Returns of two assets X and Y under four possible situations are given.

, o			12, 2, 20, 20, 21, 32, 34, 7x (1, v)
Possibilities	Probability	Return on asset - X	Return on asset - Y
1	0.15	5%	6%
2	0.25	12%	9%
3	0.50	15%	18%
4	0.10	20%	24%

Find out covariance between Asset - X and Asset - Y.

(3)(b) Dr. Prajapati purchased 800 shares of Sundar Ltd. @Rs. 122 each on 15th June, 2008. He paid brokerage of Rs. 1200. The company paid the following dividends: (7)

June 2008	Rs. 1600
June 2009	Rs. 2000
June 2010	Rs. 2400

He sold all his holding for Rs. 99,000 (net) on 15th October, 2010.

- (1) What is the holding period return?
- (2) What is the annualized return?
- (4) The details of three Mutual Funds are given below.

Mutual Funds	Average return %	Standard deviation	Beta
<b>A</b>	24 0 5 0 6 5	18%	1.10
Book	20	15%	0.90
CA A B B B B B B	26	20%	1.12
Market Index	22	17%	1.00

Risk free rate of return is 12%. Calculate Treynor, Sharpe and Jensen's measures.

OR

(4)(a) Consider the following information for three funds Ten, Zen, Pen. Calculate Treynor's and Sharpe's measures. Explain the difference. (8)

Funds	Average return	Standard deviation	Beta
Ten	40%	0.28	1.25
Zen	50%	0.21	1.00
Pen	60%	0.25	1.15

Risk free rate of return is 16%

(4)(b) Calculate Jensen measures for the following and rank them.

Portfolio	Average return	Beta		
A	24%	1.30		
В	30%	0.80		
C	20%	1.20		
Market Index	24%	1.40		

Risk free rate of return is 16%

(5)(a) Explain portfolio rebalancing.

(8)

(b) Define risk. Explain the various methods to measure risk.

**(7)** 

OR

(5) Write a short note on (Any three)

**(15)** 

- a. Efficient Market Hypothesis
- b. Constant Rupee Value Plan
- c. Insured Asset Allocation
- d. Objectives of Investment
- e. Principles of Portfolio Construction.