Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA– SEMESTER - III-EXAMINATION- SUMMER-2023

Subject Code: 4539221 Date: 19/06/2023

Subject Name: Security Analysis and Portfoilio Management

Time: 02:30 PM TO 05:30 PM Total Marks: 70

Instructions:

1. **Attempt all questions.**
2. **Make Suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Use of simple calculators and non-programmable scientific calculators are permitted.**

Q.1 Explain following terms: **[14]**

a) Capital Market Line
b) Unsystematic Risk
c) Bond Duration
d) Random Walk Theory
e) Beta
f) Stop Loss Order
g) Margin Trading

Q.2(A) Differentiate Speculation, Gambling and Investment with examples. **[7]**

(B) Define Investment? Discuss the various marketable & non-marketable investment avenues available to investors. **[7]**

OR

(B) Stock L and M have yielded the following returns for the past two years.

Year	Return %	
	L	M
1995	12	14
1996	18	12

A. What is the expected return on portfolio made up of 60% of L and 40% of M?
B. Find out the standard deviation of each stock.
C. What is covariance and coefficient of correlation between stock L and stock M? **[7]**

Q.3(A) Miss Viaana is considering an investment in the stock of PC Jewelers corporation. Miss. Viaana expects PC Jewelers corporation to earn a return of 17% in the next year. PC Jewelers' beta is 1.3, T-bill rate is 7% and market return is 15%. Should Miss. Viaana invest in the PC Jewelers corporation. **[7]**

(B) Write a note on Single Index Model**.** **[7]**

OR

Q.3(A) Explain different indicators associated with Technical analysis. **[7]**

(B) What do you mean by Efficient Market Hypothesis, Also explain the forms of market efficiency. **[7]**

Q.4(A) 1000 Rs. Par value bond currently selling at Rs.992 matures after 6 years with coupon rate of 12%. If the discount rate is 8% should Mr. Mahesh buy this bond? **[7]**

(B) Alpha and beta coefficient details of the following stocks are as under: **[7]**

Stocks	Alpha	Beta
A	1.00	0.80
B	1.35	1.15
C	1.18	1.25
D	1.25	0.95
E	1.50	1.40

Rank the five stocks using Jenson's performance measure.

OR

Q.4(A) The following three portfolios of 'Mihir Investment House' provided bellow particulars;

[7]

Portfolio	Average Annual Return	Standard Deviation	Correlation coeffiecient
A	18%	27%	0.8
B	14%	18%	0.6
C	15%	8%	0.9
Market	13%	12%	--

Risk free rate of interest of 9%. Rank these portfolios using sharpe Index and Treynor's Model.

(B) What are the principles of Bond duration? Explain in detail. **[7]**

Q.5 Miss Nikita is constructing an optimal portfolio. The market return forecast says that it would be 13.5% for the next two year with the market variance of 10%. The riskless rate of return is 5%. The following securities are under review.

Company	α	β	Residual variance
A	3.72	0.99	9.35
B	0.60	1.27	5.92
C	0.41	0.96	9.79
D	-0.22	1.21	5.39
E	0.45	0.75	4.52

[A] What is the Cut Off point of Optimal Portfolio for Miss Nikita? **[7]**

[B] Find out the stocks for optimal portfolio and also create an optimal portfolio with the calculation of proportion of investment in each stocks selected for portfolio. **[7]**

OR

Q.5 'Kinjal investment Avenues' assumes CAPM equilibrium model with unlimited borrowings and lending at the riskless rate of interest. Complete the blanks in the following table.

Security	E(R)	σ	β	Residual
A	0.15	--	2	0.10
B	--	0.25	0.75	0.04
C	0.09	--	0.50	0.17

[A] Find out expected return of security B fir 'Kinjal investment Avenues'. **[7]**

[B] Calculate standard deviation of security A and security C. **[7]**

****