

GUJARAT TECHNOLOGICAL UNIVERSITY**MBA - SEMESTER– III EXAMINATION – WINTER 2019****Subject Code: 4539221****Date: 03-12-2019****Subject Name: Security Analysis and Portfolio Management****Time: 10:30 AM TO 1.30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q. No.		Marks
Q.1	Explain the given term in brief (a) Market Risk (b) Short selling (c) Stop loss order (d) Margin trading (e) Beta (f) EMH (g) Holding Period return	14

- Q.2 (a) What do you mean by Efficient Market Hypothesis, Also Explain the forms of Market efficiency. 07
- (b) The following information is provided regarding the performance of the funds namely Birla Advantage, Sundaram Growth and Sun F&C value for a period of six month ending August 1999. The risk free rate of interest is assumed to be 9. Rank them with the help of Sharpe Index and Treynor Index. 07

	R_p	σ_p	Beta
Birla Advantage	25.38	4	0.23
Sundaram Growth	25.11	9.01	0.56
Sun F&C Value	25.01	3.55	0.59

OR

- (b) Investor has analyzed a share for 1 year holding period. The share is currently selling for Rs. 43 but pay no dividend. There is 50% chances that share will be sold either for Rs. 55 or for Rs. 60 by the end of the year. 07

You are required to calculate:

1. What is expected return from the investment?
2. How much risk lies in the investment?

- Q.3 (a) What is Duration? Explain the eight rules of Duration. 07

- (b) From the following details find out the securities that are overpriced and underpriced in terms of the security market line. **07**

Security	Expected Return	Beta	Standard deviation
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

OR

- Q.3** (a) Explain Capital Asset Pricing Model and also state its Major Assumptions. **07**
 (b) Consider two stocks, A and B **07**

	Expected return (%)	Standard deviation (%)
Stock A	16%	25%
Stock B	18%	30%

The returns on the two stocks are perfectly negatively correlated. What is the expected return of a portfolio constructed to drive the standard deviation of portfolio return to zero?

- Q.4** (a) Define investment? Discuss the various marketable and non-marketable investment avenues available to investors. **07**
 (b) Investors want to build a portfolio with the following four stocks. With the given details, find out his portfolio return and portfolio variance. The investment is spread equally over the stocks. **07**

Company	Alpha	Beta	Residual Variance
Manisha	0.17	0.93	45.15
Neha	2.48	1.37	132.25
Shilpa	1.47	1.73	196.28
Pooja	2.52	1.17	51.98

Market return (R_m) = 11
 Market return variance = 26

OR

- Q.4** (a) Write a short note on Behavioral finance. **07**
 (b) The following information is available: **07**

	Stock A	Stock B
Expected Return	16%	12%
Standard Deviation	15%	8%
Coefficient of correlation	0.60	

- (a) What is the covariance between stock A and B?

(b) What is the expected return and risk of a portfolio in which A and B have weight of 0.6 and 0.4.

Q.5 Anand is considering the purchase of three securities A, B and C for the next year. The returns of the securities depend on next year's state of the stock market. The estimate rates of return are shown in the table.

State of market	Probabilities of occurrence	Rate of return of securities		
		A	B	C
Recession	0.25	10%	9%	14%
Average	0.50	14%	13%	12%
Boom	0.25	16%	18%	10%

- (a) Find out each stock expected return. And explain in which state of market provide high return. **07**
- (b) What are the covariance between security A and B, B and C and A and C? **07**

OR

- Q.5** (a) Apply variance criterion to the alternative investment. **07**
- (b) If Anand invest one third on each security what would be his portfolio return? **07**
