Seat No:_____ Enrollment No:_____

PARUL UNIVERSITY

FACULTY OF MANAGEMENT

MBA, Summer 2018 - 19 Examination

Semester: 3 **Date: 06/05/2019**
Subject Code: 06201202 **Time: 2:00pm to 4:30pm**
Subject Name: Security Analysis & Portfolio Management **Total Marks: 60**

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.

A).Multiple choice type questions/Fill in the blanks. (Each of 1 mark) **(05)**

1. Suppose you have 20 stocks and you want to derive efficient frontier, how many co-variances do you have to calculate?

a)120 **c)**150
b)190 **d)**200

2 Market risk is also called

a) non diversifiable and systematic risk **c)** systematic and unique risk
b) Systematic and diversifiable risk **d)** unique and non diversifiable risk

3 A main difference between real and nominal return proceeds is that

a) A real return adjust for inflation and nominal return does not **c)** Real return use actual cash flows and nominal use expected cash flows
b) Real return adjust for commissions and nominal returns do not **d)** Real returns show highest possible return and nominal show lowest possible return

4 What is the expected return of an equally-weighted four-stock portfolio? The expected return of each stock is 10%, 18%, 7%, and 23%

a) 12.5% **c)** 13.5%
b) 14.5% **d)** 15.5%

5 The beta of the market portfolio is

a) 1 **c)** 0.5
b) -1 **d)** 0

B).Define the following. (Each of 1 mark) **(05)**

1. Unsystematic Risk
2. Investment
3. Semi-Strong Form of Efficient Market
4. Risk
5. Return

C).Direct questions. (Each of 1 mark) **(05)**

1. What is Margin Trading?
2. What is a reversal pattern?
3. What is a continuation pattern?
4. What information is included in Strong form of Market Efficiency?
5. What is Markowitz Efficient Frontier?

Q.2 Answer the following questions.

A). What is Capital Asset Pricing Model? State its Major Assumptions. **(07)**

B). What do you mean by Efficient Market Hypothesis, Also Explain the forms of Market Efficiency. **(08)**

Q.3 Answer the following questions.

A) Calculate the expected return and the standard deviation of returns for a stock having the following probability distribution of returns. **(07)**

Probability	0.05	0.10	0.10	0.15	0.25	0.20	0.15
Possible Return (%)	-25	-10	0	15	20	30	35

B) Calculate duration of a bond which has face value of Rs.100, paying interest at a rate of 10% and maturing in 7 years. Market YTM on such bonds is 12 percent. **(08)**

Q.4 Attempt any two questions. **(Each of 7.5 mark)** **(15)**

1. You were invested in three mutual funds schemes Namely L, *M*, and *N*, and the Mean return, standard deviation, Beta of the schemes and the return on the market are provided to you. The mean risk-free rate was 8 percent

Portfolio	Mean Return (%)	Standard Deviation (%)	Beta
L	15	20	1.6
M	12	11	0.8
N	18	15	1.3
Market	13	14	

You are required to calculate the Sharpe measure, Treynor measure and Jensen measure. Rate the schemes based on Sharpe, Treynor and Jensen.

2. The following table gives analyst expected return on two stocks for particular market:

Market Return (%)	**Aggressive Stock (%)**	**Defensive Stock (%)**
8	3	10
25	40	20

1. What are the betas of the stocks?
2. What is the expected return on each stock if market return is equally likely to be 8% and 25%?
3. If the risk free rate is 9% and market return is equally likely to be 8% or 25%, what is SML?
4. What is the alpha of two stocks?

3. Consider a portfolio that offers an expected rate of return of 12% and S.D. of 18%. T-bill offers 7%. When we specify utility by $U = E(r) – 0.005A\sigma^2$ what is the utility function for T-bills and the risky portfolio? What is the maximum level of risk aversion (A) in order for which the risky portfolio is still preferred to T-bills?

4. Your portfolio consist of three stocks A, B, and C with the weight of 25%, 32% and 43% respectively with expected return of 18% and S.D. of 28%. The T-bill rate is 8%. Your clients choose to invest 70% of his portfolio in your portfolio fund and 30% in T-bill. What is the expected return and SD of your client's portfolio? What are the investment proportions of your client's overall portfolio (A, B, C stocks and T-bill)? What is the reward to variability ratio (slope) of your portfolio and your client's portfolio?