Assignment # 1	স্কুল অব বিজনেস	BBA 7333

Bangladesh Open University

BBA Program

Semester: 221 (7th Level)

Course Title: Portfolio Management **Due on: 24 May 2024**

Instructions

- Answer the all questions in your own handwriting on A4 size white paper.
- Fill-in the cover page of your assignment with care.
- Enclose the photocopy of your ID card with the assignment (next to the cover page).
- Don't make spiral binding. Instead, make soft binding.
- Submit the assignment to the respective course tutor and ensure his/her signature on your Assignment Acknowledgement Form (see page#4 of Semester Calendar).

Questions

1. (a) What is investment? What are the objectives of investment? What are the differences between investment Vs speculation?
   (b) What is Beta? How is it interpreted? Distinguish between business risk and financial risk.
   (c) State the different segment of securities market? Differentiate between systematic risk and unsystematic risk with examples.
2. (a) What is brokerage firm? Draw the functions of a broker? Differentiate broker from dealer?
   (b) A stock costing $. 250 pays no dividends. The possible prices that the stock might sell for at the end of the year and the probability of each are:

Probable Prices	Probability
200	0.10
230	0.25
250	0.35
280	0.20
310	0.10

   (a) What is the expected return?
   (b) What is the standard deviation of the returns?
   (c) What is Random Walk Theory? Compare and contrast efficient market hypothesis with fundamental and technical analyses.
   (d) Explain the weak form of the efficient market hypothesis. Describe the empirical tests used for testing the weak form efficiency.

3. (a) Explain the concept and process of portfolio analysis. What happens to the risk of a portfolio as more and more securities are added to the portfolio or portfolio diversification with a number of securities?

(b) For the following portfolio, calculate the mean rate of return and standard deviation:

Security	Proportion	Price (Beginning of year) Rs	Increase/ Decrease during year Rs	Dividend Rs	Standard Deviation %
X	0.35	25	3	1.5	5
Y	0.25	63	-4	0	1
Z	0.40	38	5	3.0	10

Correlation coefficients of returns between: X&Y is 0.01, X&Z is -0.20, Y&Z is 0.7

Assignment # 2

স্কুল অব বিজনেস

BBA 7333

Bangladesh Open University

BBA Program

Semester: 221 (7th Level)

Course Title: Portfolio Management **Due on: 12 July 2024**

Instructions

- Answer the all questions in your own handwriting on A4 size white paper.
- Fill-in the cover page of your assignment with care.
- Enclose the photocopy of your ID card with the assignment (next to the cover page).
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- Submit the assignment to the respective course tutor and ensure his/her signature on your Assignment Acknowledgement Form (see page#4 of Semester Calendar).

Questions

1. (a) Distinguish between the feasible set of portfolios and the efficient set of portfolios.

2. (b) An investor owns a portfolio of four securities with the following characteristics:

Security	Beta β_i	Random Error (Standard Deviation) (%) σ_{ei}	Proportion w_i
1	0.79	12	0.25
2	1.85	8	0.30
3	1.05	17	0.15
4	0.82	20	0.30

Calculate the portfolio risk, assuming the standard deviation of returns on market index to be 16 per cent.

3. (a) "CAPM postulates the nature of the relationship between the expected return and the systematic risk of a security." Explain.

(b) The following data are available to you as a portfolio manager.

Security	Estimated return %	Beta	Standard deviation %
1	32	2.10	50
2	30	1.80	35
3	25	1.65	42
4	20	1.30	26
5	18	1.15	29
6	15	0.85	18
7	14	0.75	20
8	12	0.50	17
Market Index	16	1.00	25
Govt. Security	7.5	0.00	00

(a) In terms of security market line, which of the securities listed above are undervalued?

(b) Assuming that a portfolio is constructed investing equal proportion of funds in each of the above securities, what is the expected return and risk of such a portfolio.

4. (a) "Portfolio evaluation essentially comprises two functions, performance measurement and performance evaluation." Discuss.

(b) What are the different perspectives that can be adopted for evaluation of performance of investment activity

(c) What is differential return? Explain how 'Jensen ratio' measures the differential return of a portfolio.

(d) Describe how the total return of a portfolio can be decomposed into different sources, using Fama's decomposition formula.