LiBERTY COLLEGE
individual progress

BACHELOR OF BUSINESS ADMINISTRATION (BBA)

Pre-Board Examination Fall 2016

Level: Bachelor	Set A	Time: 3:00 hrs.
Program/Semester: BBA VII		Full Marks: 100
Subject: Investment Decisions		Pass Marks: 40

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all the questions:

1. a) Describe the reasons of investment. What factors should be considered while investing in Nepal? **(7)**

b) Consider the following information on a corporate bond: **(8)**

Face Value	Rs. 1,000
Annual coupon rate	12%
Term	8 years
Yield to maturity	15%

i. Calculate the bond's duration assuming the interest is paid annually.

ii. Why is duration calculated?\

2. a) Two firms of same line of industry have following probability distribution of rates of return: **(8)**

Probability	Rate of Returns	
	Firm P	Firm M
0.1	5%	10%
0.4	10	15
0.3	25	10
0.2	-30	-18

Firm P has a total investment in assets of Rs. 300 million, and firm M has total investment in assets of Rs. 200 million. Assume that a new firm D is formed through merger between firm P and firm M. The share of P and M in the portfolio represented by the new firm D is based on the ratio of their total assets prior to the merger.

Compute the following:

i. The expected return and standard deviation of firm P and M.

ii. The covariance & correlation coefficient between the returns for firm P and M.

iii. The expected return of firm D.

b) Supreme Corporation has a convertible subordinated bond with coupon rate of 12%. It has a face value of Rs. 1,000 and matures in 15 years. The common stock is currently trading at Rs. 50 per share. The conversion ratio is 25 and the interest rate on similar risk bond is 15%. Calculate: **(7)**

i. Conversion price
ii. Conversion value
iii. Conversion premium
iv. Straight bond value
v. Minimum price of convertible at present
vi. Would you convert the bond? Why?

3. a) What are the several factors affecting level of interest rate in the economy? Explain. **(8)**

b) A pension fund manager is considering two alternatives. The first is a stock fund; the second is a long-term government and corporate bond fund. The expected return and standard deviation of two investments are as follows: **(7)**

	Expected Return	Standard deviation
Stock fund (S)	25%	32%
Bond fund (B)	10	15

The correlation between the fund returns is 0.15.

i. What are the investment proportions in the minimum-variance portfolio of the two risky funds?
ii. What is the expected value and standard deviation of its rate of return?

4. a) This year, Mountain Legend Ltd. will pay a dividend on its stock of Rs. 6 per share. The following year, the dividend is expected to be the same, increasing to Rs. 7 the year after. From that point on, the dividend is expected to grow at 4% per share indefinitely. Stocks with similar risk are currently priced to provide a 10% expected return. **(8)**

i. What is the intrinsic value of Mountain Legend stock?
ii. What are the factors affecting intrinsic value?

b) Explain the features of options. **(7)**

5. a) Axim Security Inc. manages a risky portfolio with expected rate of return of 11% and standard deviation of 15%. The T-bill rate is 6%. If an investor decides to invest in this risky portfolio a proportion *y* of the total investment budget so that the overall portfolio will have an expected rate of return of 9%. **(8)**

i. What is the investment proportion, *y*?
ii. What is the standard deviation of the rate of return on investor's portfolio?

iii. Suppose that investor prefers to invest in the risky portfolio a proportion *y* that maximizes the expected return on the complete portfolio subject to the constraint that the complete portfolio's standard deviation will not exceed 15%. What is the investment proportion, *y*? What is the expected rate of return on this complete portfolio?

b) Subhan recently purchased a bond with a Rs. 1,000 face value, a 10% coupon rate, and four year to maturity. The bond makes annual interest payments, the first to be received one year from today. Subhan paid Rs. 1,050 for the bond. **(7)**

i. What is the bond's yield-to-maturity?

ii. If the bond can be called two years from now at a price of Rs. 1,200, what is its yield-to-call?

6. a) From the following information, find the value of put option using two-period binomial model. **(8)**

Current price of underlying stock	Rs. 125
Exercise price	Rs. 150
Factor by which the stock price can increase per period	1.25
Factor by which the stock price can decrease per period	0.80
Short-term risk-free rate of return	8%

b) Assume that the expected return on the market portfolio is 16% and its standard deviation is 25%. The risk-free rate is 9%. What is the standard deviation of well-diversified portfolio with an expected return of 18%? **(7)**

Write short notes: (any two) **(5x2=10)**

a) Primary market & Secondary market

b) Expectation theory

c) Dividend discount model

****ALL THE BEST****