TRIBHUVAN UNIVERSITY

2079

B.B.S. (4 Yrs.)/ IV Year / MGMT Full Marks: 100

Fundamentals of Investment **(FIN-253)** Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group "A"

Brief Answer Questions [10×2=20]

Attempt ALL questions.

1. What do you mean by investment plan?
2. List out the uses of market index.
3. Write the role of primary market.
4. Differentiate between market order and limit order.
5. Calculate the yield on a investment with Rs. 10,000 today that promises to payback Rs. 15,000 at the end of 5 years? Is this investment a good if your required rate of return is 9 percent?
6. A stock paid Rs. 40 dividend last year. The dividend is expected to grow at 6 percent rate for foreseeable future. If stock's current selling price is Rs. 500, what is the expected return on this stock?
7. A stock has a beta of 1.8 the expected return on the market is 15 percent, and the risk-free rate is 5 percent. What must the expected return on this stock be? If return on stock is 20 percent would you purchase the stock?
8. How do you interpret a portfolio with Jensen's Alpha of 1.2 percent?
9. What is the value of a put option written on a share if its strike price is Rs 160 and market price of a share is Rs. 140?
10. If you hold a call option, in what situation do you exercise it?

Group "B"

Descriptive Answer Questions [5×10=50]

Attempt any FIVE questions.

11. Describe the status of investment environment in Nepal.

12. What do you mean by fixed income securities? Describe major types of fixed income securities.

13. Assume that you sell short 500 shares of BOK stock for Rs. 200 per share. Your short margin account requires you to maintain 60 percent initial margin and 30 percent maintenance margin.
    a. What is the initial value of debt and equity in your short margin account?
    b. If stock price increase to Rs. 250 per share, what will be the value of equity, debt and actual margin in your short margin account?
    c. Do you receive a margin call if stock price increases to Rs. 250? Explain. [4+3+3]

14. Consider the following price information on three stocks on two dates with corresponding number of shares outstanding:

Stock		Price	
	Number of shares	Dec. 31, 2018	Dec. 31, 2019
A	2,000	Rs. 300	Rs. 700
B	8,000	300	380
C	8,000	200	260

   a. Construct a price-weighted index for these three stocks, and also compute the percentage change in the index the period from 2018 to 219.
   b. Construct a market value weighted index for these three stocks and also compute the percentage change in the index for the period from 2018 to 2019
   c. Construct an equally -weighted index. What is the percentage change in wealth for this equally-weighted portfolio?
   d. Briefly discuss the difference in the results for the three stock indexes. [4×2.5]

15. (a) A closed -end fund with portfolio of assets worth Rs. 2,250 million has liabilities of Rs. 50 million and 100 million shares outstanding. If the fund trades at 8 percent discount from its NAV, what is the market price of the fund's shares? [4]

(b) Describe the advantages and disadvantages of mutual fund. [6]

16. The Pokhara Foods Private Limited has net income of Rs. 7.5 million, sales of Rs. 60 million, and 1,000,000 shares of common stock outstanding. The company has total assets of Rs. 150 million and total stockholders' equity of Rs. 110 million. It pays Rs. 4.5 per share in common dividends and the stock trades at Rs. 300 per share.

a. What is the company's EPS?
b. What is its book value per share and price-to-book-value-ratio?
c. What is the company's P/E ratio and What is its net profit margin?
d. What are its dividend payout ratio and dividend yield?
e. What is the stock's PEG ratio, given that the company's earnings have been growing, at an average annual rate of 5 percent? [5×2]

Group "C"

Analytical Answer Questions [2×15=30]

Attempt any TWO questions.

17. What are the systematic steps involved in investing? How do the considerations about taxes, life cycle of investors and different economic environment affect investment?

18. The probability distribution and expected return on Stock A and B are provided below:

State of economy	Probability	Return on stock	
		Stock A	Stock B
1	0.30	-5%	20%
2	0.40	10	15
3	0.30	15	-10

Assume that an investor has Rs. 500, 000 to invest, which he/she invests dividing equally in stock A and B.

a. What are the expected returns and standard deviations of each stock?
b. What are the covariance and correlation coefficient between returns from Stock A and B?
c. What are the portfolio return and standard deviation of the portfolio?
d. Do you prefer to hold Stock A or B or the Portfolio? Explain.
e. Suppose risk-free rate is a 4 percent, market return is 10 percent, and Stock A and B have beta coefficients of 0.5 and 1.1, respectively. Are these stocks fairly priced? Overvalued? Undervalued? Explain.. [4+3+4+1+3]

19. Consider the following bonds outstanding.

Bond A: It has a coupon rate of 8 percent paid semi-annually and matures after 10 years. What will the price of this bond be if the market interest rate is 10 percent?

Bond B: It has a coupon rate of 10 percent (paid annually) and matures after 8 years. What will the price be if investors expect that the bond will be called with no call penalty after two years? Assume interest rates are currently 7 percent.

Bond C : It has a 9 percent coupon (paid annually), a maturity date of 10 years and is selling for Rs. 939. What is its current yield? What is the YTM?

Bond D: 10 percent coupon bond with 4 years maturity, yield to maturity is 12 percent. Calculate duration of Bond D.

Bond E & F: Bond E matures after five years and has a coupon rate of 8.25 percent. Bond F matures after 10 years and has a coupon rate of 8.25 percent. Market interest rates are currently 10 percent (i) Given the same coupon rate for both bonds and the same market interest rate, does the price of each bond differ? (ii) If so, why are these prices different? [2+2+4+2+5]

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