

Mid-West University
Examinations Management Office
Surkhet, Nepal
Final Examination-2078
Bachelor of Business Studies (BBS)
Semester - VII

Subject: Investment Analysis

Course Code: FIN 476

Full Marks: 60 Pass Marks: 30

Time: 3: 00 Hours

You are required to answer in your own words as far as applicable. Figures in the margins indicate full marks.

SECTION A: VERY SHORT ANSWER QUESTIONS (10 X 1 = 10 MARKS)

Answer **ALL** the questions.

1. What do you mean by financial assets?
2. Write any two differences between investment and gambling.
3. What do you mean by NEPSE Float Index?
4. If an individual bought a stock which paid dividends of Rs 5.60 and its price reached to Rs 170 from the initial price of Rs 140 at which it was bought a year ago. Calculate the HPR.
5. From the following information, which investment would you prefer? Stock A or Stock B.

Stock	A	B
Risk (σ_j)	12.15%	20.58%
Return (R_j)	14.50%	20%

6. What is arbitrage pricing theory?
7. What is the value of a share of stock of PQR Company to an investor who requires a 12% rate of return if PQR's current dividend is Rs 42.26? Assume earnings and dividends are expected to grow at a compound annual rate of 8%.
8. What do you mean by EURO Dollar?
9. A Treasury bill having face value of Rs. 10,000 with 91 days of remaining maturity sells at a bank discount yield of 7%. What is the price of Treasury bill?
10. Write any two differences between equity and bond.

SECTION B: SHORT ANSWER QUESTIONS (3 X 8 = 24 MARKS)

Answer any **THREE** questions.

11. Define investment. What are the steps involved in investing? Explain. [2+6]
12. What is security market? Describe the different types of security market. [2+6]
13. Consider the following quotation in an issue of the Wall Street Journal:

Maturity	Day to Mat.	Bid	Ask	Chg.	Ask Yield
08/12/22	170	4.69	4.55	-0.03	4.89

- i) What does 'Day to Mat. 170' means? [1]
 - ii) Explain the difference between the bid quotes and ask quotes. Is bid quote always higher than ask quote? [2]
 - iii) Calculate the bid price and ask price assuming face value of Rs. 10,000. [2]
 - iv) Explain the 'Chg. -0.03'. [2]
 - v) Notice that the bill matures in 170 days and has an ask yield of 4.89%. Is this a 170 days yield or annualized yield. [1]
14. Consider the following summary statistics about five investment portfolios:

Portfolios	Average return	Standard deviation	Beta
A	18	15	1.4

B	15	13	1.2
C	13	6	1.1
D	10	8	1
E	7	3	0.5

Assume that the riskless rate of interest is 6%.

- Which of the portfolio performed the best according to Sharpe's measures? [3]
- Which performed the best according to Treynors' performance measure? [3]
- What conclusions do you draw from above calculations in (a) and (b)? [2]

15. Following is the market information for the securities of three companies:

Year	Market Price			Shares outstanding		
	Alpha	Beta	Delta	Alpha	Beta	Delta
2014	5	40	35	1000	3000	2000
2015	2	40	30	3000	3000	2000
2016	2	45	33	3000	3000	2000

There have been 3 for 1 stock split in Alpha stock during 2014.

- Determine the price weighted index for each year using Dow Jones Industrial Average. [2]
- Determine the value weighted index for each year using standard and poor's index (S&P) with base value of 10. [3]
- What is the return for stock in 2015 and 2016 based on the price weighted index and value weighted index? [2]
- Briefly discuss the difference in the results for price weighted index and value weighted index. [1]

SECTION C: LONG ANSWER QUESTIONS (2 X 13 = 26 MARKS)

Answer any **TWO** questions.

- "Company chooses stock dividend instead to pay cash dividend". Discuss.
- Assume that you recently graduated with a major in finance, and you just landed a job as a financial planner with Merrill Finch Inc., a large financial services corporation.

Your first assignment is to invest Rs. 100,000 for a client. Because the funds are to be invested in a business at the end of 1 year, you have been instructed to plan for 1-year holding period. Further, your boss has restricted you to the following investment alternatives in the table below, shown with their probabilities and associated outcomes.

Merrill Finch's economic forecasting staff has developed probability estimates for the state of the economy, and its security analysts have developed a sophisticated computer program, which was used to estimate the rate of return on each alternative under each state of the economy. High Tech Inc. is an electronics firm; and Collections Inc. collects past-due debts. Merrill Finch also maintains a "market portfolio" that owns a market-weighted fraction of all publicly traded stocks; you can invest in that portfolio, and thus obtain average stock market results. Given the situation as described, answer the following questions:

State of economy	Probability	T bills (%)	High Tech (%)	Collections (%)	Market Portfolio (%)
Recession	0.1	8	-22%	28	-13
Below average	0.2	8	-2%	14	1
Average	0.4	8	20	0	15
Above average	0.2	8	35	- 10	29
Boom	0.1	8	50	- 20	43
Expected Return $E(R_j)$		8			15%
Standard Deviation (σ_j)		0			15.3%

- a. Which alternative provides higher expected return? [2]
 - b. Which alternative is least risky in terms of standard deviation? [4]
 - c. Suppose you created a 2-stock portfolio by investing Rs. 50,000 in High Tech and Rs. 50,000 in Collections.
 - (i) Calculate the expected return and the standard deviation for this portfolio. [4]
 - (ii) How does the riskiness of this 2-stock portfolio compare with the riskiness of the individual stocks if they were held in isolation? [2]
 - d. Why do we calculate beta when risk can be measured by standard deviation? Explain. [1]
18. Your broker offers to sell you some shares of Himshikhar Public Limited's common stock that paid a dividend of Rs 20 yesterday. You expect the dividend to grow at the rate of 8% per year for the next 3 years. You plan to buy the stock and hold it for 3 years and then sell it.
- a) Find expected dividend for each of the next 3 years. [3]
 - b) Given that the appropriate discount rate is 15% and that the first of these dividend payments will occur 1 year from now. Find the present value of the dividend stream. [3]
 - c) You expect the price of the stock 3 years from now to be Rs 388.71; that is, you **expect P_3 to equal Rs 388.71**. Discounted at **15%** rate, what is the present value **of this expected future stock price?** In other words, calculate the **PV of Rs 388 71**. [2]
 - d) If you plan to buy the stock, hold it for 3 years, and then sell it for Rs 388.71. What is the most you should pay for it? [2]
 - e) Calculate the present value of this stock. Assume that $g = 8\%$, and it is constant. [2]
 - f) Is the value of this stock dependent upon how long you plan to hold it? In other words, if your planned holding period were 2 years or 5 years rather than 3 years, would this affect the value of the stock today, P_0 ? [1]

THE END