

**TRIBHUVAN UNIVERSITY**  
**FACULTY OF MANAGEMENT**

Office of the Dean

September 2019

Full Marks: 60

Pass Marks: 27

Time: 3 Hrs.

**BIM / Sixth Semester / FIN 201: Business Finance**

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

**Group "A"**

[10 × 1 = 10]

Indicate whether the following statements are 'True' or 'False'. Support your answer with reason.

1. The investment decision of a firm is concerned with deciding on which financing sources are to be used to finance an investment
2. A stream of equal payment occur at equal interval of time to infinity is called annuity.
3. The risk-free rate is 6 percent, the expected market return is 10. If Stock's beta is 1.5, required rate of return on the stock should be 12 percent.
4. Higher liquidity ratio is desirable.
5. Value of zero coupon bond can be calculated by dividing coupon interest by discount rate.
6. Preferred stock is often called hybrid security.
7. Internal rate of return method considers entire streams of cash flows.
8. A firm purchases 25,000 units annually. Its ordering cost is Rs 100 per order and carrying cost is Rs 5 per unit. Firm's EOQ should be 1,000 units.
9. Net working capital can be defined as the difference between total assets and current liabilities.
10. Higher cash conversion cycle is desirable.

**Group "B"**

**Short Answer Questions:**

[6 × 5 = 30]

11. Compare between wealth maximization and profit maximization goals? Which goal would you like to recommend and why?
12. Following are the annual returns of Stock X and Stock Y :

Year	Return on Stock X	Return on Stock Y
1	5	25
2	10	15
3	15	5

Suppose an investor forms a portfolio of the two assets investing 40 percent funds in Stock X and the rest in Stock Y.

- a. Calculate average return and standard deviation of Stock X and Stock Y.
- b. What is the return on the portfolio?
- c. What is the standard deviation of the portfolio?

[3+1+1]

13. Kumari bank sold an issue of bonds with a 7-year maturity, a Rs 1,000 par value, a 10.25 percent coupon rate, and annual interest payments.
- If market rate of return is 11 percent, calculate value of bond at present.
  - Two years after the bonds were issued, the market rate of interest on such bonds fell to 8 percent. At what price would the bonds sell?
  - How does value of bond change with the change in market interest rate? [2+2+1]
14. The Nepal Agro Company has just paid a cash dividend of Rs 20 per share. Investors require a 15 percent return. Assume that the dividend is expected to grow at a steady 5 percent per year for ever.
- What is the current value of the stock?
  - Now suppose that the dividend is expected to grow at 10 percent per year for the next three years and then settle down to 5 percent per year, indefinitely. Calculate the value of stock today. [2+3]
15. The following information about Mega company Ltd. has been provided to you:

Mega Company Ltd.  
Balance Sheet as of December 31, 2018

Assets	Amount	Liabilities and Equity	Amount
Cash	Rs 30,000	Accounts payable	Rs 100,000
Accounts receivable	70,000	Outstanding expenses	40,000
Inventory	100,000	Long-term debt	160,000
Fixed assets	400,000	Owners' equity	300,000
Total assets	Rs 600,000	Total liabilities and equity	Rs 600,000

Other information:

Sales = Rs 1,800,000

Net profit after tax = Rs 60,000

- Calculate current ratio and quick ratio.
  - Calculate total asset turnover. Do you prefer higher or lower turnover ratio?
  - Calculate net profit margin and return on equity. [2+1+2]
16. Hi-Tech Trade Centre expects to sell 20,000 pieces of mobile sets this year. The cost of placing an order from its supplier is Rs 10,000. Each unit costs Rs 6,000 and carrying costs are Rs 100 per unit. Lead time is 9 days. Assume 360 days in a year.
- What is the economic order quantity?
  - What is the total carrying and ordering inventory cost?
  - At what inventory level should new order be placed? [2+2+1]

### Group "C"

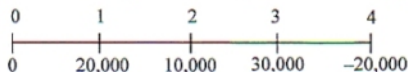
**Comprehensive answer questions:**

**Read the following information and answer the questions given below:** [2 × 10 = 20]

17. Assume that you have applied for a job with an investment company. The investment company's evaluation process requires you to take an examination that covers several financial analysis techniques. The first section of the test addresses discounted cash flow analysis.

See how you would do by answering the following questions.

- What's the future value of an initial Rs 50,000 after 3 years if it is invested in an account paying 10 percent annual interest?
- If you want an investment to double in 5 years, what interest rate must it earn?
- What's the future value and present value of a 3-year ordinary annuity of Rs 10,000 per year if the appropriate interest rate is 10 percent?
- What is the present value of the following uneven cash flow stream? The appropriate interest rate is 10 percent, compounded annually.



18. You are analyzing two proposed capital investments: Project Alpha and Project Beta. Each project has a cost of Rs 800,000, and the cost of capital for each project is 10 percent. The expected net cash flows are as follows:

Year	Expected Net Cash Flows	
	Project Alpha	Project Beta
0	(Rs 8,00,000)	(Rs 8,00,000)
1	3,00,000	4,00,000
2	3,00,000	3,50,000
3	3,00,000	2,50,000
4	3,00,000	1,50,000

- Calculate each project's payback period and net present value.
- Which project or projects should be accepted if they are independent? Which project should be accepted if they are mutually exclusive?
- Calculate IRR of the Project Alpha. Should the project be accepted on the basis of IRR?
- What are advantages and disadvantages of payback period and net present value method?

[4+2+2+2]

