

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

Office of the Dean

**2016**

Full Marks: 60

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. Executive finance functions are handled by the persons with the basic knowledge of accounting.
2. Preferred stockholders have prior claim to debt holders.  
If we identify perfectly positively correlated assets, we can completely eliminate the risk.  
If the equity multiplier is 2.0, the debt ratio must be 0.5.  
There is inverse relationship between market interest rate and value of bond.  
A rupee in hand today is worth more than a rupee to be received next year.  
Increase in the net working capital is considered as the cash outflow while determining the net cash outlay of the project.
8. If a firm places 25 times order in a year with Rs 400 costs per order placed, the total costs associated to the ordering of inventory is Rs 7,200.
9. Par value and intrinsic value of bond becomes equal when market interest rate is more than coupon rate.
10. Effective annual interest rate is always less than or equal to simple interest rate because of compounding effect.

**Group "B"**

**Short Answer Questions:**

[6 × 5 = 30]

11. What do you mean by wealth maximization? Why is wealth maximization a superior goal to profit maximization?
12. A company has a quick ratio of 1.2 times, a current ratio of 3 times, an inventory turnover ratio of 8 times, total current assets of Rs 900,000 and cash and marketable securities of Rs 140,000 in 2015. What were company's annual sales and DSO for that year? Assume there are 360 days in a year.
13. (a) Bank A pays 8 percent interest compounded quarterly, on its money market account. What is its effective interest rate?  
(b) Ram has just borrowed Rs 14,300 from Everest Bank at a compound annual interest rate of 15 percent. If the bank asks him to make annual payments of Rs 3000 per year at the end of each year on the loan, how long will it take him to repay the loan?
14. The Delta Company has two bonds issues outstanding. Both bonds pay Rs 100 annual interest plus Rs 1,000 at maturity. Bond L has a maturity of 15 years, and Bond S has a maturity of 1 year.
  - a. What will be the value of each of these bonds when the going rate of interest is (1), 8 percent (2) 12 percent? Assume that there is only one more interest payment to be made on Bond S.
  - b. Why does the longer-term (15-year) bond fluctuate more when interest rates changes than does the shorter-term bond (1 year)?

15. The risk free rate of return is 7 percent, the required rate of return on the market is 14 percent and LG Company's stock has a beta coefficient of 1.5.
- Based on the Capital Assets Pricing Model (CAPM), what should be the required return for LG Company's stock?
  - If the dividend expected during the coming year ( $D_1$ ) is Rs 10 and if constant growth rate is 5 percent, at what price should LG Company's stock sell?
16. Gorkha Chemical Fertilizer Centre sells 288,000 bags of lawn fertilizer annually. The optimal safety stock (which is on hand initially) is 1,500 bags. Each bag costs Rs 8, inventory carrying costs are 20 percent, and the cost of placing order with its suppliers is Rs 25.
- What is the economic order quantity?
  - What is the maximum inventory of fertilizer and average inventory?
  - What is the number of orders to be placed?
  - If lead time is approximately 6 days, at what inventory level an order is made? Assume 360 days in year.

### Group "C"

#### Comprehensive answer questions:

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

17. Consider the following probability distribution of rate of returns associated with stock A and B.

Events	Probability	Return from Stock A (%)	Return from stock B (%)
1	0.2	10	(4)
2	0.4	15	10
3	0.3	6	9
4	0.1	(2)	12

- Calculate the expected return and standard deviation of each stock.
  - Calculate the covariance and correlation coefficient between stock A and B.
  - If you form a portfolio investing 40 percent fund in stock A and 60 percent in stock B, what are the expected return and standard deviation of your portfolio?
  - Which investment would you prefer? Stock A, stock B or the portfolio? Why?
18. You are a financial analyst for Damon Electronics Company. The director of capital budgeting has asked you to analyze two proposed capital investments, Projects X and Y. Each project had a cost of Rs 10,000, and the cost of capital for each project is 12 percent. The projects' expected net cash flows are as follows:

Year	0	1	2	3	4
Project X (Rs)	(10,000)	3,500	3,500	3,500	3,500
Project Y (Rs)	(10,000)	6,500	3,000	3,000	1,000

- Calculate each project's payback period, net present value (NPV), and internal rate of return (IRR).
- Which project or projects should be accepted if they are independent?
- Which projects should be accepted if they are mutually exclusive?

