

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2025

Programme: BBA/BBA-BI

Full Marks: 100

Course: Basics of Managerial Accounting

Pass Marks: 45

Time: 3 hrs.

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

## Section "A"

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. Define Management Accounting.
2. Define relevant and irrelevant cost with example.
3. Define product cost and period cost.
4. What do you understand by margin of safety sales? Explain with example.
5. Write any two assumptions of break-even analysis.
6. Star Company provide following information.

|                  |       |       |
|------------------|-------|-------|
| Production units | 10000 | 40000 |
| Maintenance cost | 20000 | 60000 |

**Required:** segregation of cost into variable and fixed.

7. A manufacturing company provides the following information for 10,000 units. Total manufacturing cost Rs 20,00,000. Expected profit Rs 2,00,000.

**Required:** Mark up % under total manufacturing cost base.

8. The standard material requires for manufacturing one unit of product X is 10 kg @ Rs 6 per kg. the cost accountant reveals that 22,000 kg of raw material costing Rs 1,43,000 were used for producing 2,000 units of product X.

**Required:** Material cost variance

9. Net Profit reported by the absorption costing is Rs. 30,000. Normal fixed overhead at normal output 10,000 units equal to Rs 50,000. Closing stock units exceeds by 2,000 units during the year than that of opening sock.
10. ABC Ltd provides following information:

|                           |           |
|---------------------------|-----------|
| Fixed Cost for the Period | Rs.160000 |
| Profit                    | Rs.60000  |
| Contribution margin       | 22%       |

**Required:** Amount of sale and variable cost.

## Section "B"

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. Management accounting provides information to the managers for planning, controlling and making decisions within the organization. Explain the statement with illustrations.

12. The Biratnagar Company has provided the following data for the year 2024

| Particulars                | Units |
|----------------------------|-------|
| Production                 | 17000 |
| Sales units                | 18000 |
| Normal production capacity | 16000 |
| Ending inventory           | 2000  |

Cost and other information during the periods are as follows:

Direct material cost per unit Rs.14

Direct labour cost per unit Rs. 6

Variable factory overheads per unit Rs. 5

Budgeted fixed factory overhead is amounting to Rs.1,28,000, selling price Rs.55 per unit, variable selling cost Rs. 5 per unit and fixed selling and distribution expenses is amounting to Rs.55000.

**Required:**

- Prepare Income statements based on absorption costing. [6]
  - Reconciliation Statement. [2]
  - What are the reasons for reporting the different in profit by the income statement under Variable and absorption costing? [2]
13. KTM manufacturing company produced and sold 5,000 jackets during the year and average selling price of Rs. 1,800 per unit. Variable manufacturing cost were Rs.600 per unit and variable marketing cost were Rs. 400 per unit sold. Fixed cost amounted to Rs.12,00,000 for manufacturing and Rs. 800,000 for marketing and selling activities.

**Required:**

- Compute BEP in sales in units and Rs.
  - Compute the number of sales units required to earn a net income of Rs. 150,000 during the year.
  - Compute the Sales in Rs if profit 10% on sales.
  - If variable manufacturing cost is expected to increase by 25% in the coming year. Compute the new BEP in sales revenue.
14. The company has a normal capacity of 75,000 direct labor hours. The production and sales

|   |                |
|---|----------------|
| Regular sales in unit                       | 3,00,000 units |
| Cost of production per unit:                |                |
| Direct material                             | Rs.40          |
| Direct labor 0.2 hours                      | Rs.20          |
| Manufacturing overheads 0.2 DLH             | Rs.30          |
| Total cost per unit                         | Rs.90          |
| Selling price per unit                      | Rs.120         |
| Budgeted fixed overhead at present capacity | Rs.4,50,000    |

The company received an offer to supply 90,000 units at a price of Rs.80 per unit.

**Required:**

- a. Statement showing a differential analysis to decide whether the company should or should not accept the offer.
  - b. The opportunity cost of the offer if the company accept the offer.
15. A manufacturing company produces three standard products viz. X, Y and Z. The operating results for the last year ending December 31<sup>st</sup> are presented below in an income statement.

| Details                   | Products |          |          | Total    |
|---------------------------|----------|----------|----------|----------|
|                           | X        | Y        | Z        |          |
| Sales in units            | 10,000   | 10,000   | 5,000    | 25,000   |
| Sales Revenue in Rs       | 2,00,000 | 2,00,000 | 1,00,000 | 5,00,000 |
| Less: Cost of goods sold: |          |          |          |          |
| Fixed Mfg. OHS            | 40,000   | 40,000   | 30,000   | 1,10,000 |
| Variable Mfg. OHS         | 80,000   | 80,000   | 40,000   | 2,00,000 |
| Total                     | 1,20,000 | 1,20,000 | 70,000   | 3,10,000 |
| Gross margin              | 80,000   | 80,000   | 30,000   | 1,90,000 |
| Less, non-mfg. Costs:     |          |          |          |          |
| Variable                  | 30,000   | 30,000   | 15,000   | 75,000   |
| Fixed                     | 30,000   | 30,000   | 30,000   | 90,000   |
| Total                     | 60,000   | 60,000   | 45,000   | 1,65,000 |
| Net income before Tax     | 20,000   | 20,000   | (15,000) | 25,000   |

The operating result shows product Z have suffered losses for years therefore the management is seriously thinking to discontinue the product Z from its production line. If it does so, it will be able to reduce the fixed manufacturing overheads by Rs 10,000 as depreciation of equipment used in production of product Z.

**Required:** Should the company discontinue the product Z?

16. A Company has decided to do variance analysis of overhead. Because of the diverse nature of expenses in an organization, several approaches have been used to develop the fixed and variable component of each expense, which are as follows:
  - a. The direct material and direct labour cost per unit for the output are Rs.3 and Rs.2 respectively.
  - b. Least Square Analysis of monthly expenses rate for various expenses are:
    - i. Supervision:  $Y = 10,000 + \text{Rs.}1.5 X$
    - ii. Depreciation:  $Y = \text{Rs.}50,000 + 0 X$

- iii. Power Expenses:  $Y = 12,000 + 0.5 X$
  - c. Indirect Supplies are Rs.20,000, of which 60% variable.
  - d. Insurance expenses are estimated to be of Rs.20,000.
- All above information is estimation for the coming month for output of 20,000 units, other information are:
- i. Normal Capacity = 50,000 DLH
  - ii. each unit requires 2 DLH
  - iii. Actual hours paid = 42,000 hours
  - iv. Actual overhead rate = Rs.5

**Required:**

- a. Fixed and Variable Cost. [5]
  - b. Overhead Costs for 18,000 units. [2]
  - c. Overhead Three Variances. [3]
17. What are the different types of responsibility centers? Explain with suitable example.

Section “C”

**Case Analysis**

18. Read the case situation given below and answer the questions that follow: [20]

The budget officer of a Boniv Company is preparing various budgets for three months commencing from Baisakh and has assembled the following data:

Assets and liabilities 31<sup>st</sup> Chaitra, last year

|                            | Liabilities (Rs ) | Assets (Rs )    |
|----------------------------|-------------------|-----------------|
| Accounts payable           | 280,000           |                 |
| Accrued operating expenses | 80,000            |                 |
| Loan on mortgage           | 492,000           |                 |
| Shareholders' equity       | 400,000           |                 |
| Cash balance               |                   | 100,000         |
| Inventory                  |                   | 560,000         |
| Accounts receivable        |                   | 392,000         |
| Fixed assets               |                   | 200,000         |
| <b>Total</b>               | <b>1252,000</b>   | <b>1252,000</b> |

Gross profit averages 30 percent of sales. The company has a policy of maintaining sufficient inventory to meet the following month's sales. Experience has shown all of the purchases are paid in the month following purchase. The actual and budgeted sales for different months are as under:

| Months             |  | Sales (Rs ) |
|--------------------|--|-------------|
| Falgun (Actual)    |  | 720,000     |
| Chaitra (Actual)   |  | 800,000     |
| Baisakh (Budgeted) |  | 800,000     |
| Jestha (Budgeted)  |  | 720,000     |
| Ashad (Budgeted)   |  | 640,000     |
| Shrawan (Budgeted) |  | 760,000     |

60% of the sales are collected in the month of sale, 30% in the next month and the remaining 10% in two months. Operating expenses are 10% of gross sales, which are payable after one month. And selling and distribution expenses are 5% of gross sales which are payable when they become due. With an expansion purpose, the company is going to purchase a machine in Baisakh costing Rs 200,000 and paid equally in jestha and ashad. Depreciation rate of fixed assets is 10% p.a. The Company keeps minimum cash balance of Rs 100,000. Cash deficiencies are made up by soft bank loans that are received and repaid at 5,000 multiply the earliest available opportunity with interest rate 12% p.a.

**Required:**

- Merchandise purchase budget. [4]
- Cash Collection and disbursement budget. [10]
- Budgeted income statement. [3]
- Budgeted balance sheet. [3]

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2025

Programme: BBA/BBA-BI/BBA-TT/BCIS/BHCM/BHM

Full Marks: 100

Course: Business Research Methods

Pass Marks: 45

Time: 3 hrs.

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

## Section "A"

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. List out the essential features of scientific research.
2. Differentiate between theoretical and applied research.
3. List out six ethics to be followed by researcher while conducting research.
4. Give five advantages of literature review in research.
5. Differentiate between primary and secondary data.
6. Formulate two null and two alternative hypothesis.
7. Define dependent and independent variables with examples.
8. Mention a structure of Research Proposal.
9. Why do you write research problem in scientific research? Give six reasons.
10. Give any two examples of referencing based on APA style one for journal and one for book.

## Section "B"

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. Discuss with examples how does research support to business and management?
12. Compare between exploratory, descriptive, and causal comparative research designs with suitable illustrations. [3+3+4]
13. Give the features of Nominal, Ordinal, Interval and Ratio scale of measurement with suitable examples. [2.5×4=10]
14. "There are different types of data collection techniques. None one is superior to others but all are equally important". Discuss this statement with appropriate examples and logic.
15. Suppose you want to find out the attitudes of customers towards mobile banking service. In this context answer the following questions.
  - a. Set conceptual framework. [3]
  - b. Ask five questions designed as per 5 point Likert scale. [2.5]
  - c. Write sampling technique(s). [2.5]

- d. Write four data analysis tools. [2]
- 16. Your research topic is “Satisfaction of University Employees and its impact on quality education” which is designed in both quantitative and qualitative setting. Give the answer of following questions:
  - a. What are the possible data collection techniques? [3]
  - b. What are the possible data analysis techniques? [3]
  - c. What are the independent variables of the study? [2]
  - d. How do you measure the construct “quality education”? [2]
- 17. Distinguish between academic and professional research, reports based on its objectives, scope, time length, funding and structure. In both report quality is essential. Write elements that to be considered while preparing the research report. [5+5]

### Section “C”

#### Case Analysis

- 18. *Read the case situation given below and answer the questions that follow:* [20]

TechNova Electronics is a startup founded by Garima, a young entrepreneur with a degree in electrical engineering. The company designs and manufactures modern electronic gadgets like smart home devices and wearable technology. In Nepal, the market for wearable technology is growing, especially among urban youth and professionals who value health and fitness. However, customers are also price-sensitive and prefer products that offer good value for money.

Garima plans to launch a new smartwatch but is unsure which features will attract customers the most. She wants to target tech-savvy, high-income customers who are interested in trying new and innovative products. To make sure her new smartwatch with advanced health-monitoring features succeeds, she decides to conduct market research to understand customer preferences, identify demand, and improve her product design.

She also wants to know how much customers are willing to pay for the product. To gather this information, she considers using surveys and observational research. However, she faces challenges in designing the research, choosing the right sampling method, and analyzing the data accurately. Garima needs to ensure her research captures the preferences of this specific group while also considering the cultural and economic factors unique to the Nepalese market.

**Questions:**

- a. What is the primary research objective Garima wants to achieve with her study?
- b. Suggest an appropriate research design for her study, considering the characteristics of her target market.
- c. Which method would be more effective for gathering insights into consumer preferences, and why?
- d. Once the data is collected, what analytical techniques would you recommend Garima use to interpret the findings?



# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2025

Programme: BBA/BBA-BI/BBA-TT/BCIS

Full Marks: 100

Course: Data Analysis and Modeling

Pass Marks: 45

Time: 3 hrs.

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

## Section “A”

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. Give two basic differences between correlation and regression.
2. What do you mean by Multicollinearity and how do you measure it?
3. If  $\sum P_0Q_0 = 1,600$ ,  $\sum P_0Q_1 = 1725$ ,  $\sum P_1Q_0 = 2042$ ,  $\sum P_1Q_1 = 2185$ . Does Fisher's index satisfy factor reversal test? Explain.
4. The following table shows the number of visitors (in 00) in tourists' area over a 10 year period.

| Year                       | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| Number of tourist visitors | 28   | 27   | 33   | 25   | 34   | 33   | 35   | 30   | 33   | 35   |

Forecast the number of visitors in 2015 by using 3- period moving average approach.

5. What is balanced transportation problem and unbalanced transportation problem? How do you convert unbalanced T.P. into balanced T.P.?
6. From the following LPP, find slack or surplus values for each constraint.

$$Z \max = 20x_1 + 40x_2$$

Subject to constraints

$$6x_1 + x_2 \leq 28$$

$$x_1 + 4x_2 \leq 12$$

$$2x_1 + x_2 \leq 11$$

$$x_1, x_2 \geq 0$$

Where, Min  $Z = 160$  at  $x_1 = 4$  and  $x_2 = 2$

7. What is CPM in network analysis? Give example.
8. A SPSS software of statistics has given the following information.  
SSE = 16587033.922, SST = 80920585.185,  $n = 25$ ,  $k = 5$ .  
Find coefficient of determination and interpret its meaning.
9. Write down the objectives of assignment model.
10. Draw a network diagram for the following project plan.

| Activities   | A | B | C   | D | E   |
|--------------|---|---|-----|---|-----|
| Predecessors | - | - | A,B | A | C,D |

## Section “B”

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. The city council of Dharan has gathered data on number of minor traffic accident and the number of youth football games that occurred in town over the weekend.

|                    |    |    |    |    |    |    |    |
|--------------------|----|----|----|----|----|----|----|
| X (Football games) | 20 | 30 | 10 | 12 | 15 | 25 | 34 |
| Y (Minor accident) | 6  | 9  | 4  | 5  | 7  | 8  | 9  |

- a. Develop the estimating linear equation to predict minor accident from football games.
  - b. Predict the number of minor traffic accidents that will occur at weekends during which 30 soccer games will take place in Dharan.
  - c. What proportion of the variation occurred in minor accident is explained by football games and also finds the standard error of the estimate. Interpret the results logically.
12. Suppose you are the capital budgeting officer of a small corporation whose financing requirements over the last few years have been

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| Year            | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Millions in Rs. | 22   | 21   | 24   | 26   | 27   | 29   | 28   |

- a. What is the trend equation that best describes the above data?
  - b. Calculate the percent of trend for the above data.
  - c. Calculate the relative cyclical residual for the above data
  - d. In which year does the largest fluctuation from the trend occur, and is it the same for both methods?
13. a. From the following data, find the appropriate price index number with due justification.

| Year | Rice  |     | Wheat |     | Maize |     |
|------|-------|-----|-------|-----|-------|-----|
|      | Price | Qty | Price | Qty | Price | Qty |
| 1995 | 14    | 500 | 30    | 100 | 12    | 50  |
| 2005 | 24    | 400 | 28    | 80  | 14    | 40  |

- b. Use the following data to construct a cost living index number using the weighted geometric mean.

| Group   | A   | B   | C   | D   | E   |
|---------|-----|-----|-----|-----|-----|
| Index   | 350 | 100 | 240 | 160 | 250 |
| Weights | 5   | 1   | 1   | 1   | 2   |

14. a. The monthly turnover of a newly opened restaurant in lakeside Pokhara of last six months is given in the following table:

| Months                  | Jan | Feb | Mar | Apr | May | Jun |
|-------------------------|-----|-----|-----|-----|-----|-----|
| Turnover (in '000' Rs.) | 45  | 54  | 57  | 62  | 77  | 93  |

- i. Using exponential smoothing forecast model with smoothing coefficient 0.25, find the forecast value for the month July.
- ii. What is index number? Discuss different ways of obtaining index number.
- b. A court administrator has the task of scheduling four courts. The estimated number of days each judge would require to clear the case are as shown below:

| Judge | Court |    |    |    |
|-------|-------|----|----|----|
|       | 1     | 2  | 3  | 4  |
| A     | 14    | 13 | 17 | 14 |
| B     | 16    | 15 | 16 | 15 |
| C     | 18    | 14 | 20 | 17 |
| D     | 20    | 13 | 15 | 18 |

Find the assignment for minimum number of court days needed to process all four courts.

15. ABC construction company moves materials between three plants and three projects. Project A requires 24 units of material each week; project B requires 18 units and project C requires 33 units per week. Plant X can supply 27 units, plant Y can supply 22 units and plant Z can supply 26 units per week. The cost matrix for above schedule is given as follows:

**Cost information:**

| From    | To Project A | To project B | To project C |
|---------|--------------|--------------|--------------|
| Plant X | 23           | 25           | 26           |
| Plant Y | 17           | 21           | 12           |
| Plant Z | 29           | 30           | 19           |

Find an optimum solution to minimize the transportation cost.

16. A newly opened bakery makes coffee cakes and Danish pastries in large pans. The main ingredients used to make these products are flour and sugar. There are 60 pound of flour and 24 pound of sugar available. six pounds of flour and 3 pounds of sugar are required to make pan coffee cake and 4 pounds of flour and 2 pounds of sugar are required to make pan of Danish. A pan coffee has a profit of RS 30 and pan of Danish has profit of RS 25. Formulate the LPP, and solve the graphically to determine number of pans of cake and Danish so that profit will be maximum.

17. A research firm is planning a questionnaire survey on ``sexual harassment to office lady``. The following are the activities to be carried out for the survey:

| Activity | Predecessor | Optimistic | Most likely | Pessimistic |
|----------|-------------|------------|-------------|-------------|
| A        | -           | 4          | 5           | 6           |
| B        | -           | 8          | 12          | 16          |
| C        | A           | 4          | 5           | 12          |
| D        | B           | 1          | 3           | 5           |
| E        | D,A         | 2          | 2           | 2           |
| F        | B           | 4          | 5           | 6           |
| G        | C,E,F       | 10         | 14          | 18          |
| H        | G           | 18         | 20          | 34          |

### Questions:

- What are the expected task durations and the variances of task durations?
- Draw a network for the project and find the critical path. What is the expected duration of the project?
- What is the probability that the project will not exceed 60 days?

### Section “C”

#### Case Analysis

18. Read the case situation given below and answer the questions that follow: [20]

The following is the partially developed SPSS output of the multiple regression where the outcome variable (Y) represents the scores made by ten assembly line employees on a test designed to measure job satisfaction. The scores are affected by two factors – an aptitude test ( $X_1$ ) and the number of days absent ( $X_2$ ) during the past year (excluding vacation).

**ANOVA Table**

|            | SS         | d.f. | MS | F |
|------------|------------|------|----|---|
| Regression | 1016.26949 | 2    | ?  | ? |
| Residual   | 62.6305138 | ?    | ?  |   |
| Total      | ?          | 9    |    |   |

**Coefficients Table**

|                    | Coefficients | Standard error | t stat |
|--------------------|--------------|----------------|--------|
| Intercept          | 36.2083      | 7.3441         | ?      |
| Aptitude test      | 5.3882       | 0.9900         | ?      |
| No. of days absent | -1.6191      | 0.3909         | ?      |

- Complete above ANOVA table and Coefficient table.

- b. Fit a multiple regression model and predict the value of Y when aptitude test is 10 and number of days absent is 8.
- c. Is there any significant relationship between dependent and two independent variables? (Test at 5% significance level).
- d. Test the significance of the estimated regression coefficient of  $X_2$  at the 5% significance level.
- e. What proportion of variation in scores (Y) is explained by two independent variables? Also compare this result with the conclusion derived from (iii). Do they give same conclusion?
- f. Compute the standard error of estimate and interpret its meaning.
- g. Give a 90 percent confidence interval for the slope coefficient of aptitude test.

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2025

Programme: BBA/BBA-BI/BBA-TT

Full Marks: 100

Course: Essentials of Finance

Pass Marks: 45

Time: 3 hrs.

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

## Section "A"

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. List out the major functions of financial manager.
2. Why the interest rate on T-bond is less than corporate bond?
3. A rupee hand in today is more worth than a rupee received in future. Why?
4. What do you mean by portfolio? Why is it formed?
5. Write the advantages of NPV method.
6. What are systematic and unsystematic risks?
7. Define the term Du-Pont identity.
8. An investor purchased share at Rs.400 and sold at Rs.440 at the end of year, what should be the capital gain yield.
9. A stock has a beta of 1.5, the market risk premium is 6 percent, and the risk-free rate is 5 percent. What must be the expected return on this stock?
10. The face value of pure discount bond is Rs.1000 and issued for 5 years what should be the price be if investors required rate of return is 12 percent?

## Section "B"

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. What do you mean by financial management? Why do companies prefer wealth maximization goals compared to profit maximization goals?
12. The yield on 1-year security today is 9 percent and that on 2-year and 3-year security are 13% and 15% respectively. The real risk-free rate of interest is 3.5%. if pure expectation theory holds true,
  - a. What is the one-year implied interest rate expected in year two and year three?
  - b. What is the implied rate of inflation in year one, two and three?
  - c. Why is one year interest rate expected in year 3 higher than that of 3 years securities? Explain.
13. The following information is given below:

|                    |              |                    |            |
|--------------------|--------------|--------------------|------------|
| Sales Revenue      | Rs.2,500,000 | Interest Expense   | Rs. 50,000 |
| Cost of goods sold | 1,500,000    | Income Tax Expense | 100,000    |
| Operating expenses | 400,000      | Current Assets     | 600,000    |

|                      |           |                           |         |
|----------------------|-----------|---------------------------|---------|
| Current Liabilities  | 400,000   | Inventory                 | 200,000 |
| Long-term Debt       | 800,000   | Accounts Receivable       | 250,000 |
| Shareholders' Equity | 1,200,000 | Cash and Cash Equivalents | 150,000 |
| Total Assets         | 2,400,000 |                           |         |

**Calculate:**

- a) Current Ratio
- b) Quick Ratio
- c) Inventory Turnover Ratio
- d) Accounts Receivable Turnover Ratio
- e) Gross Profit Margin
- f) Operating Profit Margin
- g) Net Profit Margin
- h) Debt-to-equity Ratio
- i) Return on Assets
- j) Return on Equity

14. Following are the probability distribution and rates of return associated with stock P and Q.

| Probability | Stock P | Stock Q |
|-------------|---------|---------|
| 0.2         | 10%     | 8%      |
| 0.3         | 25      | 26%     |
| 0.5         | 30%     | 28%     |

- a. What do you understand about return and risk?
  - b. Calculate the expected return and standard deviation of each stock.
  - c. Calculate coefficient of variation for each stock.
  - d. Which stock will you prefer for investment and why?
15. Assume that it is now January 1, 2020. On January 1, 2021, you will Deposit Rs 100,000 into a saving account that pays 10 percent.
- a. If the bank compounded interest annually, how much will you have in your account on January 1, 2024?
  - b. What would your January 1, 2024 balance be if the bank used quarterly compounding rather than annual compounding?
  - c. Suppose you deposit the Rs 100,000 in 4 payments of Rs 25,000 each on January 1 of 2020, 2021, 2022 and 2023. How much would you have in your account on January 1, 2024, based on 10 percent annual compounding?
  - d. Suppose you deposit the Rs 100,000 in 4 payments of Rs 25,000 each on January 1 of 2021, 2022, 2023 and 2024. How much would you have in your account on January 1, 2024?
16. Govind Automobile Company is experiencing a period of rapid growth. Earnings and dividends are expected to grow at a rate of 20 percent during the next two years, at 15 percent in the third year, and at a constant rate of 6 percent thereafter. Govind Automobile's last dividend was Rs 4 and the required rate of return is 12 percent.

**Required:**

- a. Calculate the value of stock today.
  - b. Calculate the expected stock price in year 1 and 2.
  - c. Calculate the dividend yield and capital gain yield for year 1.
17. SB Company has a target capital structure of 25 percent debt, 15 percent preferred stock and 60 percent common stock. The company's tax rate is 40 percent and investors expected earnings and dividends to grow at a constant rate of 9 percent in the future. The company paid dividend of Rs 3.60 per share ( $D_0$ ), and its stock currently sells at a price of Rs 60 per share. These terms would apply to new security offerings:

Preferred: New preferred stock could be sold to the public at a price of Rs 100 per share, with a dividend of Rs 11, flotation costs of Rs 5 per share would be incurred.

Debt: Debt could be sold at an annual interest rate of 12 percent.

**Required:**

- a. Find the component costs of debt, preferred stock and common stock.
- b. What is the company's WACC?

Section "C"

**Case Analysis**

18. *Read the case situation given below and answer the questions that follow:*

You have been asked by the president of your company to evaluate the proposed acquisition of a new spectrometer for the firm's R&D department. The equipment's basic price is Rs. 70,000 and it would cost another Rs. 15,000 to modify it for special use by your firm. The spectrometer, which falls into the MACRS 3- year class, would be sold after 3 years for Rs. 30,000. Use of the equipment would require an increase in net working capital of Rs. 4,000. The spectrometer would have no effect on revenues, but it is expected to save firm Rs. 25,000 per year in before tax operating costs, mainly labor. The firm's marginal tax rate is 40 percent.

- a. What is the net cost of the spectrometer and initial cash outlay? [4]
- b. Calculate the annual depreciation of the equipment. [4]
- c. What are the net operating cash flows in year 1, 2, and 3? [6]
- d. What are the additional cash flows in year-3? [2]
- e. If the project's cost of capital is 10 percent, should the spectrometer be purchased? [4]



# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2025

Programme: BBA-BI

Full Marks: 100

Course: Risk and Insurance Management

Pass Marks: 45

Time: 3 hrs.

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

## Section "A"

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. Define frequency and severity of risk with example.
2. Mention any two contractual provisions that limit insurance coverage.
3. Why insurer is called as risk manager?
4. Define Policy Limit and Deductible.
5. Mention two benefits of "pooling of loss".
6. List out any four documents that to be required for the registration of insurance company in Nepal.
7. Draw a suitable organizational structure for a Nepalese Insurance Company.
8. Give five alternatives of Traditional Reinsurance.
9. What is the concept of Assets and Liability Management (ALM) in insurance industry?
10. Give five importance of insurance to economy.

## Section "B"

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. Discuss the different types of risk faced by businesses and individuals. How do these risk impact to firm value? Give suitable example. [3.5+3.5+3]
12. Elaborate the five major steps involved in risk management decision-making process.
13. What do you mean by departmentalization? Write role of three core department of insurance companies. [1+3×3]
14. Discuss the Rate-Making methods in life and non life insurance. [4+6]
15. "All risks are not transferable, some risks are transferable but 100% risk is not transferred", This is the essence of insurance. Prove this statement with valid reasons. [5+5]
16. What is reinsurance? Explain its types and importance.

17. Explain the investment criteria of non life insurance as per Nepal Insurance Authority.

Section “C”

**Case Analysis**

18. *Read the case situation given below and answer the questions that follow:* [20]  
Galaxy Paints Ltd., a mid sized manufacturer of decorative paints in Nepal, has been operating for over 15 years. Due to the increasing cost of raw materials, high inflation, fluctuating exchange rates, and political uncertainties, the company has begun facing operational and financial risks. In the past two years, it suffered heavy losses due to the theft of raw materials from warehouses and fire damage in one of its regional factories. The management is concerned about the risk exposures and decides to improve the company’s risk management framework. After an internal audit, it is found that many of their risks were not properly identified or measured, and the insurance coverage was limited due to certain contractual provisions and exclusions.

To better protect its assets, the company explores the pooling and diversification of risks through group insurance schemes and begins working with an insurance consultant to analyze the insurability of various risk types. The board sets the objective to reduce volatility in earnings and to improve financial predictability.

They consult with ABC Insurance Company Ltd., which provides a risk assessment report using frequency-severity analysis and correlation analysis. The insurance company’s underwriting team also evaluates the risks based on legal doctrines such as indemnity and utmost good faith, while proposing premium rates. Meanwhile, Galaxy Paints also reviews the financial statements of the insurance companies to assess their claim-paying ability and performance before finalizing the insurer.

**Questions:** [5×4]

- How did Galaxy Paints fail in risk identification and measurement?
- What are the objectives of risk management in Galaxy Paints Ltd.? How do pooling and diversification help manage risks?
- Which risks are insurable for Galaxy Paints? In what contractual provisions may limit insurance coverage?
- How do legal doctrines and insurance company operations support risk management?