

# POKHARA UNIVERSITY

Level: Bachelor  
Programme: BBA/BI  
Course: Basics of Managerial Accounting

Semester: Spring

Year: 2020  
Full Marks: 70  
Pass Marks: 31.5  
Time: 2 hrs.

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

## **Group 'A': Attempt all questions (5×10=50)**

1. 'Management accounting provides information to the managers for planning, controlling and making decisions within the organization.' Explain the statement with illustrations.
2. Hotel RARA in Mugu has monthly fixed costs applicable to its rooms of Rs. 12,00,000 for its 50-rooms, average daily room rents of Rs. 2,000 and average variable costs of Rs 750 for each room rented. It operates 30 days per month.

### **Required:**

- a) How many rooms must be occupied per month to operate break-even? [2]
  - b) How many rooms must be occupied per month to make a monthly profit of Rs. 80,000. [3]
  - c) Assume average occupancy rate per month is 70%. The hotel manager is wondering how much income could be generated by adding sales of 150 rooms. Compute the additional profit. [5]
3. You are given the following cost data:

	Unit cost (Rs.)
Direct materials	12
Direct labor	3
Variable manufacturing cost	2
Variable selling & distribution expenses	1

Budgeted normal output was 1,00,000 units with Rs. 2,00,000 fixed manufacturing cost. The fixed selling and distribution expenses were Rs. 50,000.

The operations of the year ended Dec. of the last year were:

Opening stock	10,000 units
Production	90,000 units
Sales	80,000 units
Sales price per unit	Rs. 30

### **Required:**

- a) Income statement under absorption costing. [4]
- b) Reconciled profit under variable costing. [4]

- c) Give the reason for difference in profit. [2]
4. The monthly budgets for the manufacturing overhead of a concern for two levels of activity were as follows.

<b>Leve of Activity</b>	<b>60%</b>	<b>100%</b>
<b>Budget production (unit)</b>	<b>600</b>	<b>1,000</b>
<b>Expenses (Rs.)</b>		
Indirect wages	1,200	2,000
Consumable stores	900	1,500
Maintenance	1,100	1,500
Power and fuel	1,600	2,000
Depreciation	4,000	4,000
Insurance	1,000	1,000

**Required:**

- a) Indicate which of the items are fixed, semi fixed and variable. [3]
- b) Prepare a flexible budget for 50% and 80 % level of activity. [7]
5. A company is now producing a small subassembly that is used in the production of company's main product line. The company's accounting department reports the following cost of producing the subassembly internally;

<b>Particulars</b>	<b>Per Unit</b>	<b>For 8000 units</b>
Direct Materials	Rs. 3	Rs. 24,000
Direct labour	4	32,000
Variable overhead	1	8,000
Supervisor's salary	3	24,000
Depreciation of equipment	2	16,000
Allocate general overhead	5	40,000
<b>Total</b>	<b>18</b>	<b>144,000</b>

The company has just received an offer from an outside supplier who will provide 8000 subassemblies a year at a firm price of Rs. 15 each.

**Required:**

- a) Should the company stop producing the subassemblies internally and start purchasing from the outside supplier? [5]
- b) Would the decision made in (a) change if the space used for subassemblies would generate rent of Rs. 50,000? [5]

**OR**

Manager should base pricing decision on both cost and market factors. In addition, they must also consider ethical and legal issues. Describe the influence that ethics and the law have on pricing decisions.

### Group 'B': Problem-solving/case studies (20)

6. Ace Trading Company is preparing budgets for three months commencing from January and has gathered the following data:

Liabilities	Amount	Assets	Amount
Accounts payable	70,000	Cash balance	25,000
Operating expenses payable	20,000	Inventories	1,40,000
Loan	2,92,000	Account receivables	1,34,000
Shareholder's equity	2,00,000	Fixed assets	28,3000
<b>Total</b>	<b>5,82,000</b>	<b>Total</b>	<b>5,82,000</b>

Gross profit average 30% of sales. The company has a policy of maintaining sufficient inventory to meet the next month's sales. Experience shows that 50% purchases are paid in the month of purchase and balance in next month of purchase. The actual and budgeted sales for different months are as under:

Months	Sales
Nov. (Actual)	1,80,000
Dec. (Actual)	2,00,000
Jan. (Budgeted)	2,00,000
Feb. (Budgeted)	1,80,000
March (Budgeted)	1,60,000
April (budgeted)	1,90,000

60% of sales are collected in the month of sales, 30 in the next month and remaining 10% is collected in the following next month of sales. Operating expenses are 10% of gross sales which are payable after 1 month. Selling and distribution expenses are 5% of sales which is payable in the same month. Company is going to purchase a machine in the month of January costing Rs.2,00,000. The company keeps minimum cash balance of Rs.10,000. If the cash is not sufficient, company can take loan from the Everest bank at 10% interest rate per annum. Interest is paid only at the time of repayment of principal. All borrowing is made at the beginning of the month and all repayable are made at the end of month. All the borrowings and payable are made in the multiple of Rs.1,000.

#### Required:

- Purchase budget for three months endings March. [5]
- Cash receipt and disbursement budget for three months ending March. [10]
- Budgeted income statement for three months ending March.[5]

# POKHARA UNIVERSITY

Level: Bachelor                      Semester: Spring  
Programme: BBA/BI/BCIS/BHCM/BHM/TT  
Course: Business Research Methods

Year: 2020  
Full Marks: 70  
Pass Marks: 31.5  
Time: 2 hrs.

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

## **Group 'A': Attempt all questions (5×10=50)**

1. 'Prolonged lockdown may force to decide business organizations in adopting divestiture strategy as an aftermath of COVID-19'. With reference to this, do you suggest business organizations to adopt research methods and process of retrieved business for data collection and analysis? Explain and justify.

**OR**

Explain the characteristics of scientific research. What is the difference between applied and pure research? What are the important ethical issues to be considered in management research?

2. Define literature review. Write the sources of literatures? Justify, literature review with regard to minimize the research gap.
3. What are the elements that a researcher must consider before using primary data? Evaluate the relative merits and demerits (in terms of cost, response rate and speed) of any two of the following methods of primary data collection:
  - a) Observation
  - b) Interviewing
  - c) Questionnaire
4. Define measurement. Write the types of measurement scales. If you are interested doing a marketing survey of KFC restaurant, how to measures the attitudes of customer's interest and satisfaction. Design different questionnaires for this survey.
5. Discuss the purpose of a research proposal. Is there any difference between a funded research proposal and an academic research proposal? Discuss the contents to be included in the "Research Methodology" section of a research proposal?

## **Group 'B': Problem-solving/case studies (20)**

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

The administrators of Civil Service Hospital, New Baneshwor, Kathmandu one of the city's largest, are interested to know the attitudes of the patients towards various aspects of the hospital after a stay of

week or longer. The hospital administrators are specifically interested in the attitudes of those patients who have been treated in the hospital from 1 April 2019 (time of COVID-19) onwards till today and on average 2500 patients are treated in the hospital. Out of this almost 35%, patients stay beyond one week in the hospital for treatment.

They have authorized the undertaking of a marketing research study to gather this and have directed that it covers the following area:

All administrative functions with which patients come into contact (such as admitting, billing, and so on); the treatment and attitudes of interns and doctors; the food service and general housekeeping; the attention of nurses and nurse's aides; the courtesy and care of personnel in such department as physical therapy and x-ray; the availability of religious services and a generally quiet and environment

**Questions:**

- a) What is the main objective of the research in the given situation?
- b) What research designs would you recommend for this study and why?
- c) What would be the best sampling method and why? What sample size you would recommend? And why?
- d) Design a questionnaire that can be used for this study. You are supposed to include at least 10 questions in the designed questionnaire.

# POKHARA UNIVERSITY

Level: Bachelor Semester: Spring  
Programme: BBA/BI/BCIS/TT  
Course: Data Analysis and Modeling

Year: 2020  
Full Marks: 70  
Pass Marks: 31.5  
Time: 2 hrs.

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

## Group 'A': Attempt all questions (5×10=50)

1. What are the major purposes of regression analysis especially in the field of business and management problems? [2+8]

The manager of a brokerage firm is interested in finding out if a number of new clients a broker brings into the firm affects the sales generated by the brokers. They sampled 8 brokers and determine the number of new clients they have enrolled in the last years and their sales amounts in thousands.

Clients	32	28	36	25	15	33	40	12
Sales	48	44	59	58	34	55	64	Assume any one number between 20 to 30

- a) Develop the linear equation to predict the amount of sales for a person who brings 34 new clients in the firm.
- b) Interpret the meaning of estimated regression coefficient based on your problem.
- c) What percentage of variation on sales is explained by variation on clients?
- d) Compute standard error of the estimate and interpret the result obtained.
2. Write down the importance of time series analysis in business. [2+8]

In a town XYZ company manufactures portable massage tables. Since they started, the number of table they have sold is represented by this time series.

Year	2014	2015	2016	2017	2018	2019	2020
Sales (000)	2.2	2.1	2.4	2.6	2.7	2.9	2.8

The trend equation which best describe the given data is

$$\hat{Y} = 2.5 + 0.13x \quad \text{where } 2017 = 0 \text{ and } x \text{ units} = 1 \text{ year.}$$

- a) Calculate percent trend for these data
- b) Calculate relative cyclical residual for these data
- c) Also calculate MSE and MAPE as well.

3. Explain the role of active and inactive constraints in linear programming problem.

A firm manufacturing two types of electrical items A and B, can make a profit of Rs. 160 per unit of A and Rs. 240 per unit of B. Both A and B make use of two essential components, a motor and a transformer. Each unit of A required 3 motors and 2 transformers and each unit of B required 2 motors and 4 transformers. The total supply of components per month is restricted to 210 motors and 300 transformers. Type B is an export model requiring a voltage stabilizer, which has a supply restricted to 65 units per months. Formulate the problem in mathematical form. How many each of A and B should the firm manufacture per month to maximize its profit? How much will be the profit? Use the graphical method to find the optimal solution. [2+8]

4. Why do we need to add a dummy source or destination in a transportation problem? [2+8]

A supplier supplies raw material to three different projects W, X, and Y from its three different plants A, B and C. Cost and volume information are given below. Find the optimum transportation cost.

Plant	Unit Available	project	Unit demanded
A	27	W	24
B	22	X	18
C	26	Y	33

Cost (in rupees) information:

From	To project W	To project X	To project Y
Plant A	13	25	26
Plant B	17	21	12
Plant C	29	30	19

**OR**

Describe balance and unbalanced assignment problems with example.

A company has four jobs A, B, C and D to be done by four machines W, X, Y and Z. Any one of the jobs can be proceed completely on any one of the machine. The cost of processing in Rupees any job on any machine is given below. Assign the job to each machine which will minimize the total cost. [3+7]

Jobs	Machine			
	W	X	Y	Z
A	10	16	12	9
B	24	22	20	26
C	30	28	32	34
D	15	12	10	16

5. Differentiate between CPM and PERT method. [2+8]

Consider a project has following activity along with duration.

Activity	A	B	C	D	E	F	G	H	I
Predecessor	-	A	A	B	B	C	E	D,F	G,H
Most likely time	4	5	4	15	10	8	4	1	6
Optimistic time	6	7	8	20	18	9	8	2	7
Pessimistic time	8	15	12	25	26	16	12	3	8

- Find the Expected time and variance time for each activity.
- Draw the network diagram and find Expected project completion time.
- Find the Probability that project will be completed within 50 days.

**Group 'B': Problem-solving/case studies (1×20=20)**

6. A professor of Statistics is keenly interested in assessing the effect of different factors on student's performance in the examination because he observed that the midterm examination for the past semester had a wide distribution of grades. The grade is the dependent variable in the given situation. He guessed that several factors can explain the distribution. Accordingly, he allowed his students to study from many different books as they liked, their IQs vary, they are of different ages, and they study varying amounts of time for exams. He compiled them and ran a multiple regression using a statistical software. The output is given below:

**Coefficient table**

	Unstandardized coefficients		t	p-value
	Coefficient (bj)	Standard error (Sbj)		
Constant	-49.948	41.55	-1.20	0.268
Hours	1.069	0.981	1.09	0.312
IQ	1.365	0.376	0.63	0.008
Books	2.039	1.508	1.35	0.218
Age	-1.799	0.673	-2.67	0.319

**ANOVA Summary table**

Source	Sum of squares (SS)	df	Means Square (MS)	F
Regression	3134.42	4	783.60	?
Residual	951.25	7	135.89	
Total	4085.67	11		



- a) What is best fitting regression equation for these data?
- b) What percentage of variation in grades is explained by this equation?
- c) Compute standard error of estimate and interpret the result.
- d) What grade would you expect for 21 years old student with an IQ of 113, who studied 5 hours and used three different books? Also obtain 95% approximate prediction interval.
- e) At 5% level of significance, explain that whether the relationship is significant or not between one dependent variable and four independent variables?
- f) At the 0.01 level of significance, which of the given independent variables is the better explanatory variable for examination grade? Are all significant at 0.01 level of significance? Support your answer using p-value level of significance.
- g) Why multiple regression analysis is necessary over simple linear regression? You are supposed to answer this issue without considering the above problem.

# POKHARA UNIVERSITY

Level: Bachelor  
Programme: BBA/BI/TT  
Course: Essentials of Finance

Semester: Spring

Year: 2020  
Full Marks: 70  
Pass Marks: 31.5  
Time: 2 hrs.

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

## **Group 'A': Attempt all questions (5×10=50)**

1. How can you define the wealth maximization goal? Why is it superior to the profit maximization goal? Critically examine.

**OR**

Suppose the annual yield on a 2-year Treasury bond is 4.5 percent, while that on a 1-year bond is 3 percent.  $k^*$  is 1 percent, and the maturity risk premium is zero.

- a) Using the expectations theory, forecast the interest rate on a 1-year bond during the second year. (Hint: Under the expectations theory, the yield on a 2-year bond is equal to the average yield on 1-year bonds in years 1 and 2).
  - b) What is the expected inflation rate in year 1? Year 2?
2. K. Company had earnings per share of Rs 8 last year, and it paid a dividend of Rs 4 per share. Book value per share at year-end was Rs 80, while total retained earnings increased by Rs. 24 million during the year. The firm has no preferred stock, and no new common stock was issued during the year. If the firm's year-end debt (which equals its total liabilities) was Rs 240 million, what was the company's year-end debt/asset ratio?
  3. Following are the probability distribution and rates of return associated with stocks A and B.

Probability	Stock A	Stock B
0.3	-20%	5%
0.3	30	25
0.4	40	30

- a) What are the expected returns and standard deviations of each stock?
- b) Which stock would you prefer for investment? Why?
- c) If the correlation of A and B is 0.95 and you invest 70 percent in stock A and 30 percent in stock B, calculate risk and return on the portfolio?

4. Assume that it is now January 1, 2021. On January 1, 2022, you will deposit Rs.1,000 into a savings account that pays 8%.
  - a) If the bank compounds interest annually, how much will you have in your account on January 1, 2025?
  - b) What would your January 1, 2025, balance be if the bank used quarterly compounding rather than annual compounding?
  - c) Suppose you deposited the Rs.1,000 in 4 payments of Rs.250 each on January 1 of 2022, 2023, 2024 and 2025 each. How much would you have in your account on January 1, 2025, based on 8% annual compounding?
5. Nepal Electric Company (NEC) uses only debt and equity. It can borrow unlimited amounts at an interest rate of 10 percent as long as it finances at its target capital structure, which calls for 45 percent debt and 55 percent common equity. Its last dividend was Rs. 2, its expected constant growth rate is 4 percent, and its stock sells at Rs. 20. NEC's tax rate is 40 percent. Two projects are available: Project A has a rate of return of 13 percent, while Project B has a rate of return of 10 percent. All of the company's potential projects are equally risky and as risky as the firm's other assets.
  - a) What is NEC's cost of common equity?
  - b) What is NEC's WACC?
  - c) Which projects should NEC select?

**Group 'B': Problem-solving/case studies (20)**

6. You are a financial analyst for Kathmandu Electronics Company. The director of capital budgeting has asked you to analyze two proposed capital investments, Projects X and Y. Each project has 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	Expected Net Cash Flows	
	Project X	Project Y
0	Rs. (10,000)	Rs. (10,000)
1	6,500	3,500
2	3,000	3,500
3	3,000	3,500
4	1,000	3,500

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

- d) How might a change in the cost of capital produces a conflict between the NPV and IRR rankings of these two projects? Would this conflict exist if the cost of capital were 5 percent?  
(Hint: Plot the NPV profiles.)
- e) Why does the conflict exist?

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2020

Programme: BBA-BI

Full Marks: 70

Course: Risk and Insurance Management

Pass Marks: 31.5

Time: 2 hrs.

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

## **Group 'A': Attempt all questions (5×10=50)**

1. Justify the importance of RME in large construction companies, big factory having the large production unit, and infrastructure development sites. Write a letter to convince the government that why Risk Management Expert should be placed in each Ministry of Government also.

**OR**

"All risk are not insurable but some are insurable. We can identify the risk using different factors and criteria" justify the statement and also mention how the coverage of risk does limit by different provisions.

2. Find the 6 months report of two factories related to the accidents and the total cost of each accident.

Factory A			Factory B		
Date	Event	Total Loss (Rs.000)	Date	Event	Total Loss (000)
Jan	5	234	Jan	45	34
Feb	6	60	Feb	12	120
March	12	45	March	34	45
April	7	67	April	56	70
May	90	134	May	23	31
June	20	160	June	30	100
<b>Total</b>	<b>140</b>	<b>700</b>	<b>Total</b>	<b>200</b>	<b>400</b>

- a) Which factory is riskier? Why?
  - b) If risk management cost of factory A and B is Rs. 400000 each, is it beneficial to implement the scheme to A? B? Justify your answer.
  - c) Can you predict the event and total loss for factory A and B? Show.
3. XYZ company operates a vehicle parking business where some degree of risk is associated. The risk is presented by a statistician as follow:

Status of situation	Probability	Loss (Rs. 000)
Worse	0.10	9400
Average	0.85	1000
Satisfactory	0.05	10

- a) Predict the probable loss of the vehicle in amount.
  - b) If there is the equal chances of occurring of the three situation, what would be the probable loss? Increase or decrease?
4. As per the directives of the corporate governance for insurer issued by Beema Samiti, there should be at least 7 departments. Discuss why 7 department are essential? And why some of departments need to lead by separate persons?
  5. Insurance companies have an obligation to follow the investment directives. Discuss the current scenario of investment of life and nonlife insurance companies. Why non-mandatory (optional) area of investment is not fully invested?

#### **Group 'B': Problem-solving/case studies (20)**

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

In July 2013, the Financial Stability Board identified an initial list of nine multinational insurance groups it considers to be global systemically important insurers (G-SIIs), including three based in the United States (American International Group, MetLife, and Prudential Insurance). These insurers were identified on the belief that should one of them become insolvent and fail in a disorderly manner, it could have negative impacts on the stability of the global financial system.

The IAIS assessment and FSB identification became an annual process, with the FSB and IAIS developing a framework of policy measures to be applied to G-SIIs with the objective of reducing the negative externalities stemming from the potential disorderly failure posed by a G-SII.

This framework of G-SII policy measures consisted of three main elements: (a) higher loss absorbency (HLA) requirements which; (b) enhanced group-wide supervision, including for the group-wide supervisor to have direct powers over holding companies and to oversee the development and implementation of a Systemic Risk Management Plan and a Liquidity Management Plan; and (c) group-wide recovery and resolution planning and regular resolvability assessments.

While the annual assessment process resulted in some changes to the original 2013 list, the three insurers based in the U.S. remained on the

list. However, in 2017 and 2018 the FSB, in consultation with the IAIS and national authorities announced its decision not to publish a new list of G-SIIs saying it welcomed work of the IAIS being undertaken to develop an activities-based approach to systemic risk.

This work eventually became the IAIS holistic framework which was adopted in November 2019. Following its adoption, the FSB decided to suspend G-SII identification as of the beginning of 2020. In November 2022, based on an assessment of the initial years of implementation of the holistic framework, the FSB will review the need to discontinue or re-establish an annual identification of G- SIIs. Accordingly, the IAIS is undertaking a two-phase process to help inform the FSB's review consisting of a baseline assessment and a targeted jurisdictional assessment.

**Questions:**

- a) Give the reasons behind the identification of GSIIIs?
- b) What are the three main elements of G-SII policy measures?
- c) Why did FSB decide to suspend G-SII identification as of the beginning of 2020?
- d) How FSB and IAIS are doing jointly for the GSIIIs?