

Bangladesh Open University
MBA Program
Semester: 192 (4th Level)

Course: Business Research Methods

Due on: May 27, 2022

Instructions

- Answer the all questions in your own handwriting on A4 size white paper.
- The assignment must be submitted on the assigned date to the Coordinator of the study center you are attached with.
- Spiral binding is strictly prohibited. Instead, transparent folder or file cover or any other soft binding may be used.

Questions

1. (a) “Basic Research often provides the Foundation for Applied Research.” Do you agree? Explain.
 - (b) Discuss the factors that influence whether or not business research is needed.
 - (c) Name and describe the four characteristics that help determine how valuable data may be to researchers and managers.
 - (d) Compare and contrast pull technology and push technology.

2. (a) What is a theory, what are its goals, and why is it useful to business researchers?
 - (b) Compare and contrast the terms *concept* and *variable* and give an example of each.
 - (c) How does a hypothesis differ from a proposition?
 - (d) Discuss how theories are developed.

3. (a) Identify the following type of data (qualitative/quantitative) and the level of measurement. Explain the reasons for your choices:
 - (i) The ages of the respondents in a survey
 - (ii) The genders of the respondents in a survey
 - (iii) The years in which the respondents to a survey were born
 - (iv) The voting intentions of the respondents in a survey classified as republican, Democrat or undecided
 - (v) The race of the respondents in a survey classified as White, African American, Asian or Other
 - (vi) The performance rating of employees classified as Above Expectations, Meets Expectations, or Below Expectations
 - (vii) The uniform number of each member on a sports team
 - (viii) A list of the graduating high school seniors by class rank
 - (ix) Final exam scores for your statistics class on a scale of 0 to 100
 - (x) The state in which the respondents in a survey reside

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

- (b) Identify each of the following as either descriptive or inferential statistics.
- (i) The average salary of a random sample of 50 high school teachers in 2013 was \$52,400.
 - (ii) Based on a random sample of hotels in Chicago and a random sample of hotels in Atlanta, it was concluded that the average cost of a hotel room in Chicago was greater than one in Atlanta.
 - (iii) A study has concluded that the average credit card debt of college graduates has increased from 2012 to 2013.
 - (iv) The average Amazon.com rating of the book *The Complete Idiot's Guide to Statistics* by reviewers in 4.6 on a scale of 1 to 5.
 - (v) Seventy-eight percent of customers at the Holiday Inn hotel in Dover, Delaware, arrived before 6 pm last week.
4. (a) Compare and contrast exploratory, descriptive, and causal research. Which approach is the best?
- (b) Explain how a researcher makes causal inferences.
- (c) A walk-in clinic for emergency room services maintains records of the number of patients it treats per day. The following table shows the frequency of the patient arrivals over the course of a 150-day period:

| Number of Patients per Day | Frequency |
|----------------------------|-----------|
| 20 to under 40 | 10 |
| 40 to under 60 | 16 |
| 60 to under 80 | 25 |
| 80 to under 100 | 65 |
| 100 to under 120 | 34 |

- (i) Calculate the approximate average number of patients per day.
- (ii) Calculate the approximate variance and standard deviation of the number of patients per day.

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

Bangladesh Open University
MBA Program
Semester: 192 (4th Level)

Course: MBA: Business Research Methods

Due on: July 29, 2022

(Answer all the questions in your own handwriting on A4 size white pages)

1. (a) Compare and contrast random sampling and systematic (nonsampling) errors.
(b) The following table shows the total points scored in the 16 National Football League games played during Week of the 2021 season.

| | | | | | | | |
|----|----|----|----|----|----|----|----|
| 41 | 62 | 64 | 50 | 47 | 33 | 49 | 72 |
| 76 | 40 | 52 | 36 | 26 | 50 | 57 | 36 |

- (i) Calculate the mean for this population.
(ii) Calculate the sampling error using the first four games in the first row as your sample.
(iii) Calculate the sampling error using the eight games in the first row as your sample.
(iv) How does increasing the sample size affect the sampling error?
(v) Using a sample size of 4, what is the largest sampling error that can be observed from this population?
- (c) According to the National Association of Theater Owners, the average price for a movie in the United States in 2020 was \$7.96. Assume the population standard deviation is \$0.50 and that a sample of 30 theaters was randomly selected.
- (i) Calculate the standard error of the mean.
(ii) What is the probability that the sample mean will be less than \$7.75?
(iii) What is the probability that the sample mean will be less than \$8.10?
(iv) What is the probability that the sample mean will be more than \$8.20?
2. (a) The University of Delaware would like to describe the linear relationship between the grade point average (GPA) and the starting monthly salary of a graduate who earned a business degree from the university. The following table shows the monthly starting salaries for eight graduates of the business school along with their corresponding GPAs:

| Starting Salary (\$) | GPA | Starting Salary (\$) | GPA |
|----------------------|-----|----------------------|-----|
| 2,600 | 3.2 | 3,000 | 3.7 |
| 2,900 | 3.4 | 2,900 | 4.0 |
| 2,500 | 2.6 | 2,200 | 2.5 |
| 2,600 | 3.5 | 2,400 | 3.3 |

- (i) Determine the sample correlation coefficient between the starting salary and the GPA of a University of Delaware business graduate.
(ii) Using $\alpha = 0.05$ and the data from the above table, test if the population correlation coefficient between the starting salary and the GPA of a University of Delaware business graduate is greater than zero. What conclusions can you draw?

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

- (b) The following table lists the SAT scores for 27 college students:

| | | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| 845 | 1,040 | 815 | 1,345 | 1,554 | 668 | 1,165 | 919 | 1,175 |
| 629 | 490 | 1,074 | 387 | 894 | 1,419 | 941 | 454 | 673 |
| 696 | 974 | 564 | 1,245 | 1,535 | 665 | 471 | 1,188 | 680 |

- (i) Identify the first, second, and third quartiles.
 (ii) Determine the interquartile range.
- (c) A company operates two retail outlets at different locations. The following table lists the customer satisfaction rating on a scale of 1 to 10 for each locations:

| Store 1 | Store 2 |
|---------|---------|
| 7 | 8 |
| 4 | 7 |
| 6 | 10 |
| 3 | 8 |
| 9 | 8 |

Which location provides a more consistent level of customer satisfaction?

3. (a) Compare and contrast Type I errors and Type II errors and explain which one is of more concern to researchers.
 (b) Compare and contrast parametric statistics and nonparametric statistics.
 (c) A particular university includes a capstone course in its MBA program which all graduating students take and covers an overview of topics for their degree. The following contingency table shows the number of students from three different concentrations along with the grade they received in the capstone course.

| Concentration | Grade | | |
|---------------|-------|----|----|
| | A | B | C |
| Management | 10 | 20 | 10 |
| Marketing | 30 | 40 | 30 |
| Finance | 20 | 40 | 0 |

- (i) What are the appropriate null and alternative hypothesis to be tested?
 (ii) Perform a hypothesis test to determine if the concentration of the students and the grade they received in the capstone course are independent variables using $\alpha = 0.01$.
4. (a) Pretzel Guys is a retail establishment that bakes hand-rolled pretzels on site for its customers. A key step in the pretzel-baking process is to ensure that a consistent size pretzel is hand-rolled by each employee. To test for consistency, a random sample of four pretzels made by each employee is given below.

| Jane (1) | Tom (2) | Jason (3) |
|----------|---------|-----------|
| 2.5 | 2.1 | 3.3 |
| 2.7 | 2.9 | 2.8 |
| 2.2 | 2.2 | 3.7 |
| 2.6 | 2.4 | 3.0 |

- (i) State the null and alternative hypotheses.
 (ii) Calculate the sample means and grand mean.
 (iii) Calculate the total sum of squares (SST).
 (iv) Calculate the mean square total (MST).

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

- (b) Answer the following using your results from the Pretzel Guys problem described in (a).
 - (i) Calculate the sum of squares between (SSB) and the mean square between (MSB).
 - (ii) Calculate the sum of squares within (SSM) and the mean square within (MSW).
 - (iii) Calculate the appropriate test statistic for the ANOVA procedure.
 - (iv) Using $\alpha=0.05$, can you conclude that there is a difference in the average weight of the pretzels made by the three employees?
 - (v) Verify your results with excel.

- 5.
 - (a) List the seven major elements of a formal research report.
 - (b) Discuss what is included in the body of a research report.
 - (c) Discuss the various types of graphic aids researchers can include in a research report.
 - (d) Describe the purpose of the oral presentation and list suggestions for effective presentations.

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

Bangladesh Open University

MBA Program

Semester: 192 (4th Level-Major in AIS)

Course Title: Corporate Financial Reporting and Analysis

Due on 27 May 2022

Instructions

- Answer all questions in your own handwriting on A4 size white paper.
- Fill in the cover page of your assignment with care.
- Enclose the photocopy of your ID Card with the assignment (next to the cover page).
- Don't make the spiral binding. Instead, make the soft binding.
- Submit the assignment to the study center coordinator and ensure his/her signature on your Assignment Acknowledgement Form (see page#8 of Semester Calendar).

Questions

- 1.(a) Briefly describe the major sections of a corporate financial report.
- (b) Explain why financial statements are important to stakeholders.
- 2.(a) Describe the basic components of financial statements.
- (b) Narrate the enhancing qualities of useful accounting information.
3. Below are given the consolidated Balance Sheets of Delta Ltd. for the year ended 31 December 2020 and 2021.

Delta Ltd.
Balance Sheet
As on 31 December

| <i>Account Titles</i> | <i>2020</i> | <i>2021</i> |
|--------------------------------|--------------------|--------------------|
| Share Capital | Tk.300,000 | Tk.300,000 |
| Reserves | 125,000 | 175,000 |
| Debentures | 160,000 | 140,000 |
| Terms Loans | 50,000 | 50,000 |
| Accounts Payable | <u>75,000</u> | <u>60,000</u> |
| Total Capital and Liabilities | <u>710,000</u> | <u>725,000</u> |
| Fixed Assets (at cost) | 525,000 | 525,000 |
| Less: Accumulated Depreciation | <u>80,000</u> | <u>115,000</u> |
| Total Fixed Assets | 445,000 | 410,000 |
| Cash | 75,000 | 110,000 |
| Accounts Receivable | 80,000 | 90,000 |
| Inventories | <u>110,000</u> | <u>115,000</u> |
| Total Assets | Tk. <u>710,000</u> | Tk. <u>725,000</u> |

Delta Ltd.
Income Statement
For the Year Ended December 31

| <i>Account Titles</i> | <i>2020</i> | <i>2021</i> |
|--------------------------|----------------|----------------|
| Net Sales | Tk.400,000 | Tk.500,000 |
| Less: Cost of Goods Sold | <u>180,000</u> | <u>220,000</u> |

| | | |
|--|-------------------|-------------------|
| Gross Profit | 220,000 | 280,000 |
| Less: Selling and Administrative Expenses | <u>60,000</u> | <u>70,000</u> |
| Earnings before Depreciation, Interest & Tax | 160,000 | 210,000 |
| Less: Depreciation | <u>40,000</u> | <u>55,000</u> |
| Earnings before Interest and Tax | 120,000 | 155,000 |
| Less: Interest | <u>20,000</u> | <u>15,000</u> |
| Earnings before Tax | 100,000 | 140,000 |
| Less: Tax | <u>25,000</u> | <u>35,000</u> |
| Divisible Profit (Net Profit after Tax) | 75,000 | 105,000 |
| Less: Dividend | <u>40,000</u> | <u>50,000</u> |
| Retained Earnings | Tk. <u>35,000</u> | Tk. <u>55,000</u> |

Required:

Calculate the relevant ratios indicating the liquidity and profitability position of the company and comment.

- 4.(a) Assume that a Boeing Corporation signs a contract to sell airplanes to Delta Air Lines for Tk. 1000 million. Graphically show the five steps that Boeing should follow to recognize its revenue.
- (b) In 2019, Concord Construction Company began construction work under a 3-year contract. The contract price was Tk. 1,000,00,000. Concord uses the percentage-of-completion method for financial accounting purposes. The income to be recognized each year is based on the proportion of cost incurred to total estimated costs for completing the contract. The financial statement presentations relating to this contract at December 31, 2019, are shown below.

Balance Sheet

Accounts receivable Tk. 18,00,000
 Construction in process Tk. 65,00,000
 Less: Billings 61,50,000
 Costs and recognized profit in excess of billings 3,50,000

Income Statement

Income (before tax) on the contract recognized in 2019 Tk. 19,50,000

Required:

- (i) How much cash was collected in 2019 on this contract?
 (ii) What was the initial estimated total income before tax on this contract?

Bangladesh Open University**MBA Program**Semester: 192 (4th Level-Major in AIS)**Course Title: Corporate Financial Reporting and Analysis****Due on 29 July 2022**

1. (a) Provide examples of assets that do not qualify for interest capitalization.
 (b) On December 31, 2016, Main Inc. borrowed Tk.3,000,000 at 12% payable annually to finance the construction of a new building. In 2017, the company made the following expenditures related to this building: March 1, Tk.360,000; June 1, Tk.600,000; July 1, Tk.1,500,000; December 1, Tk.1,500,000. The building was completed in February 2018. Additional information is provided as follows.

1. Other debt outstanding:
 10-year, 13% bond, December 31, 2010, interest payable annually Tk.4,000,000
 6-year, 10% note, dated December 31, 2014, interest payable annually. Tk.1,600,000
 2. March 1, 2017, expenditure included land costs of Tk.150,000.
 3. Interest revenue earned in 2017 Tk.49,000

Required:

- (i) Determine the amount of interest be capitalized in 2017 in relation to the construction of the building.
 (ii) Prepare the journal entry to record the capitalization of interest and the recognition of interest expense, if any, at December 31, 2017.
2. The income statement of Apex Limited is shown below.

Apex Limited
Income Statement
For the Year Ended December 31, 2021

| | | |
|--------------------------|------------------|---------------------|
| Sales revenue | | Tk.6,900,000 |
| Cost of goods sold | | |
| Beginning inventory | Tk.1,900,000 | |
| Purchases | <u>4,400,000</u> | |
| Goods available for sale | 6,300,000 | |
| Ending inventory | <u>1,600,000</u> | |
| Cost of goods sold | | <u>4,700,000</u> |
| Gross profit | | 2,200,000 |
| Operating expenses | | |
| Selling expenses | 450,000 | |
| Administrative expenses | <u>700,000</u> | <u>1,150,000</u> |
| Net income | | <u>Tk.1,050,000</u> |

Additional information:

- (i) Accounts receivable decreased Tk.360,000 during the year.
 (ii) Prepaid expenses increased Tk.170,000 during the year.

- (iii) Accounts payable to suppliers of merchandise decreased Tk.275,000 during the year.
- (iv) Accrued expenses payable decreased Tk.100,000 during the year.
- (v) Administrative expenses include depreciation expense of Tk.60,000.

Required:

Prepare the operating activities section of the statement of cash flows for the year ended December 31, 2021, for Apex Limited, using the indirect method.

3.(a) “The growth in leasing indicates that it often has some genuine advantages over owningProperty”. Describe these advantages.

(b) Lanka Bangla Leasing Company signs an agreement on January 1, 2019, to lease equipment to Padma Company. The following information relates to this agreement.

1. The term of the noncancelable lease is 5 years with no renewal option. The equipment has an estimated economic life of 5 years.
2. The fair value of the asset at January 1, 2019, is Tk.80,00,000.
3. The asset will revert to the lessor at the end of the lease term, at which time the asset is expected to have a residual value of Tk.7,00,000, none of which is guaranteed.
4. Padma Company assumes direct responsibility for all executory costs, which include the following annual amounts: (i) Tk.90,000 to Phoenix Insurance Company for insurance and (ii) Tk.1,60,000 to Chattogram Division for property taxes.
5. The agreement requires equal annual rental payments of Tk.18,14,200.95 to the lessor, beginning on January 1, 2019.
6. The lessee’s incremental borrowing rate is 12%. The lessor’s implicit rate is 10% and is known to the lessee.
7. Padma Company uses the straight-line depreciation method for all equipment.
8. Padma Company uses reversing entries when appropriate.

Required: (Round all numbers to the nearest paisa.)

- (i) Prepare an amortization schedule that would be suitable for the lessee for the lease term.
- (ii) Prepare all of the journal entries for the lessee for 2019 and 2020 to record the lease agreement, the lease payments, and all expenses related to this lease. Assume the lessee’s annual accounting period ends on December 31.

Bangladesh Open University
MBA Program
Semester 192 (4th Level)

Course: Strategic Management Accounting

Due on: May 27, 2022

Instructions

- Answer all the questions in your own handwriting on A4 size white paper.
- The assignment must be submitted on the assigned date to the Coordinator of the study center you are attached with.
- Spiral binding is strictly prohibited. Instead, transparent folder or file cover or any other soft binding may be used.

Questions

1. (a) Explain how a shift in the sales mix could result in both a higher break-even point and a lower net income.
- (b) Puleva Milenario SA, a company located in Toledo, Spain, manufactures and sells two models of luxuriously finished cutlery – Alvaro and Bazan. Present revenue, cost and sales data on the two products appear below. All currency amounts are stated in terms of Spanish pesetas (e.g., 400 ptas represents 400 Spanish pesetas).

| | Alvaro | Bazan |
|------------------------------------|---------------|--------------|
| Selling price per unit ----- | 400 ptas | 600 ptas |
| Variable expenses per unit ----- | 240 ptas | 120 ptas |
| Number of units sold monthly ----- | 200units | 80 units |

Fixed expenses are 66,000 ptas per month.

Required:

- i. Assuming the sales mix above, do the following:
 - (a) Prepare a contribution income statement showing both Peseta and Percent columns for each product and for the company as a whole.
 - (b) Compute the break-even point in pesetas for the company as a whole and the margin of safety in both pesetas and percent of sales.
- ii. The company has developed another product, Cano, that company plans to sell for 800 ptas each. At this price, the company expects to sell 40 units per month of the product. The variable expenses would be 600 ptas per unit. The company's fixed expenses would not change.
 - (a) Prepare another contribution income statement, including the Cano product (sales of the other two products would not change.)
 - (b) Compute the company's new break-even point in pesetas for the company as a whole and the margin of safety in both pesetas and percent of sales.
- iii. The president of the company was puzzled by your analysis. He did not understand why the break-even point has gone up even though there has been no increase in fixed costs and the addition of the new product has increased the total contribution margin. Explain to the president what has happened.

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

2. (a) Why are overhead rates in activity-based costing based on the level of activity at capacity rather than on the budgeted level of activity?
- (b) Sven's Cookhouse is a popular restaurant located on Lake Union in Seattle. The owner of the restaurant has been trying to better understand costs at the restaurant and has hired a student intern to conduct an activity-based costing study. The intern, a consultation with the owner, identified three major activities. She then completed the first-stage allocations of costs to the activity cost pools, using data from last month's operations. The results appear below:

| Activity Cost Pool | Activity Measure | Total Cost | Total Activity |
|------------------------------|--------------------------|------------|----------------|
| Serving a party of Diners... | Number of parties served | \$ 12,000 | 5,000 parties |
| Serving a diner | Number of diners served | \$ 90,000 | 12,000 diners |
| Serving a drink..... | Number of drinks ordered | \$ 26,000 | 10,000 drinks |

The above costs include all of the costs of the restaurant except for organization-sustaining costs such as rent, property taxes, and top-management salaries. A group of diners who ask to sit at the same table are counted as a party. Some costs, such as the costs of cleaning linen, are the same whether one person is at a table or the table is full. Other costs, such as washing dishes, depend on the number of diners served. Prior to the activity-based costing study, the owner knew very little about the costs of the restaurant. He knew that the total cost for the month (including organization-sustaining costs) was \$ 180,000 and that 12,000 diners had been served. Therefore, the average cost per diner was \$ 15.

Required:

- (i) According to the activity-based costing system, what is the total cost of serving each of the following parties of diners?
- A party of four diners who order three drinks in total.
 - A party of two diners who do not order any drinks.
 - A lone diner who orders two drinks.
- (ii) Convert the total costs you computed in (1) above to costs per dinner. In other words, what is the average cost per diner for serving each of the following parties of diners?
- A party of four diners who order three drinks in total.
 - A part of two diners who do not order any drinks.
 - A lone diner who orders who drinks.
- (iii) Why do the cost per diner for the three different parties differ from each other and from the overall average cost of \$ 1,500 per diner?

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

3. (a) Distinguish between a cost center, a profit center, and an investment center.
 (b) Financial data for Bridger, Inc., for last year appear below:

BRIDGER, INC.

Balance Sheet

| Assets | Ending Balance | Beginning Balance |
|---|---------------------------|------------------------------|
| Cash | \$ 130,000 | \$ 125,000 |
| Accounts receivable | 480,000 | 340,000 |
| Inventory | 490,000 | 570,000 |
| Plant and equipment, net | 820,000 | 845,000 |
| Investment in Brief Company | 430,000 | 400,000 |
| Land (undeveloped) | <u>250,000</u> | <u>250,000</u> |
| Total assets | <u>\$ 2,600,000</u> | <u>\$ 2,530,000</u> |
| Liabilities and Stockholder's Equity | | |
| Accounts payable | \$ 340,000 | \$ 380,000 |
| Long-term debt | 1,000,000 | 1,000,000 |
| Stockholder's equity | <u>1,260,000</u> | <u>1,150,000</u> |
| Total liabilities and stockholder's equity | <u>\$ 2,600,000</u> | <u>\$ 2,530,000</u> |

BRIDGER, INC.

Income Statement

| | | |
|--------------------------|----------------|-------------------|
| Sales | | \$ 4,180,000 |
| Less operating expenses | | 3,553,000 |
| Net operating income | | 627,000 |
| Less interest and taxes: | | |
| Interest expense | \$ 120,000 | |
| Tax expense | <u>200,000</u> | <u>320,000</u> |
| Net operating income | | <u>\$ 307,000</u> |

The company paid dividends of \$ 197,000 last year. The "Investment in Brief Company" on the balance sheet represents an investment in the stock of another company.

Required:

- (i) Compute the company's margin, turnover, and return on investment (ROI) for last years.
- (ii) The board of directors of Bridger, Inc. has set a minimum required return of 20%. What was the company's residual income last year?

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

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Bangladesh Open University
MBA Program
Semester 192 (4th Level)

Course: Strategic Management Accounting

Due on: July 29, 2022

(Answer all the questions in own handwriting on A4 size white pages)

1. In cases 1-3 below, assume that Division A has a product that can be sold either to Division B of the same company or to outside customers. The managers of both divisions are evaluated based on their own division's return on investment (ROI). The managers are free to decide if they will participate in any internal transfers. All transfer prices are negotiated. Treat each case independently.

| | Case | | | |
|---|--------|---------|---------|---------|
| | 1 | 2 | 3 | 4 |
| <u>Division A:</u> | | | | |
| Capacity in units ----- | 50,000 | 300,000 | 100,000 | 200,000 |
| Number of units now being sold to | | | | |
| Outside costumers ----- | 50,000 | 300,000 | 75,000 | 200,000 |
| Selling price per unit on the outside market | \$ 100 | \$ 40 | \$ 60 | \$ 45 |
| Variable costs per unit----- | \$ 63 | \$ 19 | \$ 35 | \$ 30 |
| Fixed costs per unit (based on capacity) ----- | \$ 25 | \$ 8 | \$ 17 | \$ 6 |
| <u>Division B:</u> | | | | |
| Number of units needed annually ----- | 10,000 | 70,000 | 20,000 | 60,000 |
| Purchase price now being paid to an outside supplier ----- | \$ 92 | \$ 39 | \$ 60 | - |

Before any quantity discount.

Required:

1. Refer to case 1 above. A study has indicated that Division A can avoid \$5 per unit in variable costs on any sales to Division B. Will the managers agree to a transfer and if so, within what range will the transfer price be? Explain.
2. Refer to case 2 above. Assume that Division A can avoid \$4 per unit in variable cost on any sales to Division B.
 - (a) Would you expect any disagreement between the two divisional managers over what the transfer price should be? Explain.
 - (b) Assume that Division A offers to sell 70,000 units to Division B for \$38 per unit and that Division B refuses this price. What will be the loss in potential profit for the company as a whole?
3. Refer to case 3 above. Assume that Division B is now receiving a 5% quantity discount from the outside supplier.
 - (a) Will the managers agree to a transfer? If so, within what range will the transfer price be?
 - (b) Assume the Division B offers to purchase 20,000 units from Division A at \$52 per unit. If Division A accepts this price, would you expect its ROI to increase, decrease, or remain unchanged? Why?

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

4. Refer to case 4 above. Assume that Division B wants Division A to provide it with 60,000 units of a different product from the one that Division A is now producing. The new product would require \$25 per unit in variable costs and would require that Division A cut back production of its present product by 30,000 units annually. What is the lowest acceptable transfer price from Division A's perspective?

2. Chateau Beaune is a family-owned winery located in the Burgundy region of France, which is headed by Gerard Despinoy. The harvesting season in early fall in the busiest part of the year for the winery, and many part-time workers are hired to help pick and process grapes. Mr. Despinoy is investigating the purchase of a harvesting machine that would significantly reduce the amount of labor required in the picking process. The harvesting machine is built to straddle grapevines, which are laid out in low-lying rows. Two workers are carried on the machine just above ground level, one on each side of the vine. As the machine slowly crawls through the vineyard, the workers cut bunches of grapes from the vines, which then fall into a hopper. The machine separate the grapes behind the machine as a rich ground mulch. Mr. Despinoy has gathered the following information relating to the decision of whether to purchase the machine:
 - a. The winery would save \$ 190,000 per year in labor costs with the new harvesting machine. In addition, the company would no longer have to purchase and spread ground mulch – at an annual savings of \$ 10,000.
 - b. The harvesting machine would cost \$ 480,000. It would have an estimated 12 years useful life and zero salvage value. The winery uses straight-line depreciation.
 - c. Annual out-of-pocket costs associated with the harvesting machine would be insurance. \$ 1,000; fuel \$ 9,000, and a maintenance contract, \$ 12,000. In addition, two operators would be hired and trained for the machine, and they would be paid a total \$ 70,000 per year, including all benefits.
 - d. Mr. Despinoy feels that the investment in the harvesting machine should earn at least a 16% rate of return.

Required:

(Ignored income taxes)

- (i) Determine the annual net savings in cash operating costs that would be realized if the harvesting machine were purchased.
- (ii) Compute the simple rate of return expected from the harvesting machine. (Hint: This is a cost reduction project.)
- (iii) Compute the payback period on the harvesting machine. Mr. Despinoy will not purchase equipment unless it has a payback period of five years or less. Under this criterion, should the harvesting machine be purchased?
- (iv) Compute (to the nearest whole percent) the internal rate of return promised by the harvesting machine. Based on this computation, does it appear that the simple rate of return is an accurate guide in investment decision?

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

3. (a) Explain how the cost of capital serves as a screening tool when dealing with (a) the net present value method and (b) the internal rate of return method.
- (b) Austin Company is investigating five different investment opportunities. Information on the five projects under study is given below:

| | Project Number | | | | |
|--|-----------------------|------------------|------------------|------------------|------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Investment required-- | \$ (480,000) | \$ (360,000) | \$ (270,000) | \$ (450,000) | \$ (400,000) |
| Present value of cash inflows at a 10% discount rate - | <u>567,270</u> | <u>433,400</u> | <u>336,140</u> | <u>522,970</u> | <u>379,760</u> |
| Net present value ---- | <u>\$ 87,270</u> | <u>\$ 73,400</u> | <u>\$ 66,140</u> | <u>\$ 72,970</u> | <u>\$ 20,240</u> |
| Life of the project --- | 6 years | 12 years | 6 years | 3 years | 5 years |
| Internal rate of return | 16% | 14% | 18% | 19% | 8% |

Since the company's required rate of return 10%, a 10% discount rate has been used in the present value computations above. Limited funds are available for investment, so the company can't accept all of the available projects.

Required:

1. Compute the profitability index for each investment project.
2. Rank the five projects according to preference, in terms of:
 - a. Net present value.
 - b. Profitability index.
 - c. Internal rate of return.
3. Which ranking do you prefer? Why?

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

Bangladesh Open University
MBA Program
Semester: 192 (4th Level- Major in AIS)

Course: Accounting Information Systems

Due on: May 27, 2022

Instructions

- **Answer the all questions in your own handwriting on A4 size white paper.**
- **The assignment must be submitted on the assigned date to the Coordinator of the study center you are attached with.**
- **Spiral binding is strictly prohibited. Instead, transparent folder or file cover or any other soft binding may be used.**

Questions

1. (a) Discuss what is meant by the statement, “The accounting system is a conceptual flow of information that represents the physical flows of personnel, raw materials, machinery, and cash through the organization.”
(b) Explain how an accounting information system (AIS) adds value to an organization, how it affects and is affected by corporate strategy, and its role in a value chain.
2. (a) Describe the data processing cycle used to process transactions, including how data is input, stored, and processed and how information is output.
(b) Discuss the role of the conversion cycle for service and retailing entities.
3. (a) Why are the computer ethics issues of privacy, security, and property ownership of interest to accountants?
(b) Why is access control over revenue cycle documents just as important as the physical control devices over cash and inventory?

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

Bangladesh Open University
MBA Program
Semester: 192 (4th Level- Major in AIS)

Course: Accounting Information Systems

Due on: July 29, 2022

(Answer all the questions in own handwriting on A4 size white pages)

1. (a) How are journal vouchers used as a control mechanism?
(b) Discuss any separation of duties necessary to control against unauthorized entries to the general ledger. What other control procedures regarding the general ledger should be employed?
2. (a) What is an REA diagram? Discuss the rules for linking events to resources and agents in an REA diagram.
(b) Define ERP. Define core applications and give some examples.
3. John Smith worked in the stockyard of a large building supply company. One day he unexpectedly left for California, never to return. His foreman seized the opportunity to continue to submit time cards for John to the payroll department. Each week, as part of his normal duties, the foreman received the employee paychecks from payroll and distributed them to the workers on his shift. Because John was not present to collect his paycheck, the foreman forged John's name and cashed it.

Required

Describe two control techniques to prevent or detect this fraud scheme.

Note: Submit your assignment to the Coordinator of the Study Center you are attached with.

Bangladesh Open University
MBA Program
 Semester: 192 (4th Level-Major in AIS)

Course: Accounting for Governmental and Non-Profit Organizations Due on: May 27, 2022

Instructions

- Answer all questions in your own handwriting on A4 size white paper.
- Fill in the cover page of your assignment with care.
- Enclose the photocopy of your ID Card with the assignment (next to the cover page).
- Don't make the spiral binding. Instead, make the soft binding.
- Submit the assignment to the study center coordinator and ensure his/her signature on your Assignment Acknowledgement Form (see page#8 of Semester Calendar).

Questions

1. (a) “Governmental and not-for-profit organizations do not differ significantly from for-profit organizations and therefore should follow for-profit accounting and reporting standards.” Do you agree or disagree with this statement? Why or why not?
 (b) What are the three sections of a comprehensive annual financial report (CAFR)? What information is contained in each section? How do the minimum requirements for general purpose external financial reporting relate in scope to the CAFR?
2. (a) Discuss the nature of major fund reporting and the criteria used to determine whether a fund should be reported as a major fund.
 (b) Describe the fiduciary activities of a state or local government and explain how accounting and financial reporting for fiduciary activities differ from those for governmental and business-type activities.
3. (a) Explain why some transactions for governmental activities at the government-wide level are reported differently than transactions for the General Fund. Give some examples of transactions that would be recorded in the general journals of (a) only the General Fund, (b) only governmental activities at the government-wide level, and (c) both.
 (b) Property owners in Trevor City were shocked when they recently received notice that assessed valuations on their homes had increased by an average 35 percent, based on a triennial reassessment by the County Board of Equalization. Like many homeowners in the city, you have often complained about the high property taxes in Trevor City, and now you are outraged that your taxes will apparently increase another 35 percent in the coming year.

After stewing all weekend about the unreasonable increase in assessed valuation, you decide to visit the county tax assessor on Monday to find out why your assessed valuation has increased so rapidly. When you finally reach the counter, the customer service representative explains that reassessment considers such factors as actual property sales in particular neighborhoods, trends in building costs, and home improvements. He also explains that heavy demand for both new and previously owned homes has skyrocketed in the Trevor City area in recent years. Moreover, you learn that the reassessment on your home is only average, with some being higher and some lower. Although this information calms you down somewhat, you ask: “But how can we possibly afford a 35 percent increase in our taxes next year?” The representative explains that actual tax rates are set by each jurisdiction having taxing authority over particular properties (in your case, these are the county government, Trevor City, the Trevor City Independent School District, the Trevor City Library, and the Trevor City Redevelopment Authority), so he cannot say how much property taxes will actually increase.

Required:

When you have regained your composure, prepare a brief written analysis objectively evaluating the probability that your property taxes will actually increase by 35 percent next year. In doing so, consider factors that you feel may mitigate against such a large increase. What would have to happen to the tax rates for your taxes to remain at their current level or increase only slightly?

Bangladesh Open University
MBA Program
Semester: 192 (4th Level-Major in AIS)

Course: Accounting for Governmental and Non-Profit Organizations Due on: July 29, 2022

1. (a) Explain how capitalization of interest costs differs for enterprise funds as opposed to governmental funds.
(b) During the year an enterprise fund purchased Tk.230,000 worth of equipment. The equipment was acquired with a cash down payment of Tk.23,000 and a Tk.207,000 loan. What is the net effect of this transaction on the net asset accounts of the enterprise fund?
2. (a) Explain how trust funds differ from agency funds.
(b) Journalize the following transactions in the agency funds of current year:
 - (i) Assessments in the amount of Tk.480,000, payable in 10 equal installments, were levied on benefited property owners.
 - (ii) All current assessments receivable were collected along with 5 percent on the previous unpaid receivable balance.
 - (iii) Special assessment bond principal in the amount of Tk.48,000 and interest in the amount of Tk.24,000 were paid during the current year.
 - (iv) The second installment of assessments receivable was reclassified at year-end from the deferred category to the current category.
3. (a) Explain how organizations in the not-for-profit sector differ from organizations in the public sector or for-profit business sector. Provide an example of an entity in each sector.
(b) Make the necessary journal entries in the book of a university.
 - (i) Collections of cash for tuition and fees receivable amounting to Tk.5,650,000, grants receivable of Tk.1,075,000, and Tk.4,945,000 in pledges receivable. For those pledges collected from prior periods, Tk.14,000 of the Discount on Pledges Receivable was amortized and recorded as unrestricted contributions.
 - (ii) Accounts payable and accrued liabilities were paid in the amounts of Tk.4,003,500 and Tk.9,133,900, respectively. Refunds of students' deposits amounted to Tk.10,000.