

## Bangladesh Open University

MBA Program

Semester: 182 (4<sup>th</sup> Level)

Course: Business Research Methods

Due on: December 6, 2019

### *Instructions for Assignment Submission*

1. Answer all questions in your own handwriting on A4 size white paper.
2. Fill-in the cover page (see page#8 of Semester Calendar) of your assignment with care.
3. Submit the assignment to the study centre coordinator or his delegate and ensure his/her signature on your Assignment Acknowledgement Form (see page#9 of Semester Calendar).
4. Don't make spiral binding. Instead, make soft binding.
5. Send a mail with your ID Number and Level to **mbacoordinator.bou@gmail.com** with subject "Add Me", if your e-mail address is not yet added to our e-mail list.
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### Questions

1. (a) What do you mean by Business Research?  
 (b) Distinguish between exploratory research, descriptive research and causal research.  
 (c) Discuss major phases of business research process.
2. (a) Define knowledge management. What is its purpose within an organization?  
 (b) What type of operational questions could a delivery firm like FedEx expect to automate with the company's decision support system?  
 (c) What makes a decision support system successful?  
 (d) What is data warehousing?
3. (a) Why is convenience sampling considered to be a non-statistical sampling method?  
 (b) Explain the difference between stratified random sampling and cluster sampling.  
 (c) Give the name of the kind of sampling that was most likely used in each of the following cases:
  - (i) Wall Street Journal poll of 2,000 people to determine the president's approval rating.
  - (ii) A poll taken of each of the General Motors (GM) dealerships in Ohio in December to determine an estimate of the average number of Chevrolets not yet sold by GM dealerships in the United States.
  - (iii) A quality-assurance procedure within a Frito-Lay manufacturing plant that tests every 1,000th bag of Fritos Corn Chips produced to make sure the bag is sealed properly.
  - (iv) A sampling technique in which a random sample from each of the tax brackets is obtained by the Internal Revenue Service to audit tax returns.

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4. (a) Why proper definition of research problem is essential to business research? Explain.  
 (b) Describe in brief the process of problem definition.  
 (c) What is a research proposal? Discuss the sections of a research proposal.
5. (a) A professor wishes to develop a numerical method for giving grades. He intends to base the grade on homework, two midterms, a project, and a final examination. He wishes the final exam to have the largest influence on the grade. He wants the project to have 10%, each midterm to have 20%, and the homework to have 10% of the influence on the semester grade.

(i) Determine the weights the professor should use to produce a weighted average for grading purposes.

(ii) For a student with the following grades during, the quarter, calculate a weighted average for the course:

Instrument	Final	Project	Midterm-1	Midterm-2	Homework
Percentage Grade	64	98	67	63	89

(iii) Calculate an (unweighted) average of these five scores and discuss why the weighted average would be preferable here.

- (b) Avalon Bagel provides take-out service for a variety of breakfast items. The following table shows the number of orders that have been recently placed grouped by the size of the order in dollars.

Size of Order	Number of orders
\$0 to under \$5	10
\$5 to under \$10	12
\$10 to under \$15	14
\$15 to under \$20	5
\$20 to under \$25	9

- (i) What is the approximate average order size for this sample?  
 (ii) What is the approximate variance for the order size for this sample?

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**Bangladesh Open University**  
**MBA Program**  
**Semester: 182 (4<sup>th</sup> Level)**

**Course: MBA: Business Research Methods**

**Due on: January 31, 2020**

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

1.
  - (a) What do you mean by Hypothesis testing?
  - (b) Define: Null hypothesis and alternative hypothesis.
  - (c) Write down the steps to be performed for hypothesis test.
  - (d) What is the significance of understanding of confidence intervals?
  - (e) A business research class with 110 students recently had an exam. The mean exam score was a 78.3 and the standard deviation of the exam score was 7.2. What is the probability that a random sample of 32 exams has an average score more than 80?
  
2.
  - (a) The average battery life of the iPhone is reported to be 6.0 hours by Apple. Assume that the standard deviation for the battery life for this cell phone is 30 minutes. A random sample of 50 iPhones had an average battery life of 5.7 hours. Use a 90% confidence interval to test the validity of Apple's claim?
  - (b) A survey by Harris Interactive reported that 35% of college students prefer digital textbooks over traditional print textbooks. State University would like to confirm these results. A random sample of 125 students was asked their textbook preference and a total of 37 preferred the digital format. Use a 95% confidence interval to validate the Harris Interactive findings.
  
3.
  - (a) "The standard error of the difference between two means describes the variation in the difference between two sample means." Do you agree? Explain.
  - (b) The management of the Green Bay Packers football team would like to test the hypothesis that the average price of a ticket is less than \$225 on the secondary market. A random sample of 40 customers paid an average of \$207 for their ticket. Assume that the standard deviation of the price of tickets for Packers games is \$43. The Green Bay Packers would like to set  $\alpha = 0.01$ . Use the critical value approach to test this hypothesis.
  - (c) The management of the Green Bay Packers football team would like to test the hypothesis that the average price of a ticket is less than \$225 on the secondary market. A random sample of 40 customers paid an average of \$207 for their ticket. Assume that the standard deviation of the price of tickets for Packers games is \$43. The Green Bay Packers would like to set  $\alpha = 0.01$ . Use the  $p$ -value approach to test this hypothesis?

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- (d) Traveler's Insurance would like to test the hypothesis that the average number of miles driven per month by a male teenage driver exceeds the average number of miles driven per month by a female teenage driver by more than 50 miles. The following data summarizes the sample statistics for the miles driven per month by each gender. Assume that the population variances are equal.

	Male	Female
Sample mean	685	580
Sample size	13	16
Sample standard deviation	130	120

Define Population 1 as male drivers and Population 2 as female drivers and use the critical value approach to test this hypothesis with  $\alpha = 0.05$ .

4. (a) "Analysis of variance compares the variance *between* samples to the variance *within* those samples to determine if means of populations are different." Explain.  
 (b) "When the *F*-test statistic is greater than the critical *F*-score for ANOVA, the correct conclusion is to fail to reject the null hypothesis?" Explain.  
 (c) The following data show the download speed in megabytes per second for a random sample of Smartphone users in three cities using four different networks.

Carrier	Locations		
	New York	Washington	San Francisco
AT&T	35	14	14
Sprint	12	7	8
T-Mobile	19	11	9
Verizon	30	12	9

Perform a randomized block ANOVA using  $\alpha = 0.05$  to test if a difference exists in average download speed between these three cities.

5. (a) What are the statistical application in chi square tests?  
 (b) When the chi-square test statistic is greater than the chi-square critical value when comparing two or more population proportions, we fail to reject the null hypothesis? Do you agree? Explain.  
 (c) How will you calculate the degree of freedom?  
 (d) Dave is a photographer who sells his prints at Jersey Art during the summer months on consignment. Dave sells three different size prints during the months of June, July, and August. The following contingency table shows the number of prints sold each month last summer.

Month	Print Sizes		
	11x14	13x19	16x20
June	3	12	5
July	18	17	15
August	10	20	0

Perform a hypothesis test to determine if the print size and the month that it was sold are independent variables using  $\alpha = 0.01$ .

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6.
  - (a) What is a report?
  - (b) Explain different parts of an analytical research report.
  - (c) State the methods of writing reference regarding (i) Books, (ii) Journals, (iii) Unpublished dissertation (iv) Thesis.

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**Bangladesh Open University**  
**MBA Program**  
**Semester: 182 (4<sup>th</sup> Level-Major AIS)**

**Course: Corporate Financial Reporting and Analysis**

**Due on: December 6, 2019**

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**Questions**

- 1.(a) Briefly describe the major financial statements and other means of financial reporting.  
 (b) Describe some of the challenges facing financial reporting.
  
- 2.(a) What is a conceptual framework? Why is a conceptual framework necessary in financial accounting?  
 (b) Briefly describe the two fundamental qualities of useful accounting information.
  
- 3.(a) What is meant by solvency? What information in the balance sheet can be used to assess a company's solvency?  
 (b) The following situation involves the capitalization of interest.

On January 1, 2018, Nibras Inc. signed a fixed-price contract to have Builder Associates construct a major plant facility at a cost of Tk.4,000,000. It was estimated that it would take 3 years to complete the project. Also on January 1, 2018, to finance the construction cost, Nibras borrowed Tk.4,000,000 payable in 10 annual installments of Tk.400,000, plus interest at the rate of 10%. During 2018, Nibras made deposit and progress payments totaling Tk.1,500,000 under the contract; the weighted- average amount of accumulated expenditures was Tk.800,000 for the year. The excess borrowed funds were invested in short-term securities, from which Nibras realized investment income of Tk.250,000.

***Required:***

What amount should Nibras report as capitalized interest at December 31, 2018?

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- 4.(a) What are the criteria to recognize revenue?
- (b) Taylor Marina has 300 available slips that rent for Tk.80,000 per season. Payments must be made in full at the start of the boating season, April 1, 2015. Slips for the next season may be reserved if paid for by December 31, 2014. Under a new policy, if payment is made by December 31, 2014, a 5% discount is allowed. The boating season ends October 31, and the marina has a December 31 year-end. To provide cash flow for major dock repairs, the marina operator is also offering a 20% discount to slip renters who pay for the 2016 season.

For the fiscal year ended December 31, 2014, all 300 slips were rented at full price. Two hundred slips were reserved and paid for the 2015 boating season, and 60 slips for the 2016 boating season were reserved and paid for.

***Required:***

- (i) Prepare the appropriate journal entries for fiscal 2014.
- (ii) Assume the marina operator is unsophisticated in business. Explain the managerial significance of the accounting above to this person.

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**শুভ্র অথ বিজ্ঞান**  
**Bangladesh Open University**  
**MBA Program**  
**Semester: 182 (4<sup>th</sup> Level)**

Course: Corporate Financial Reporting and Analysis

Due on: January 31, 2020

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

1. You have just been hired as a financial analyst for Lydex Company, a manufacturer of safety helmets. Your boss has asked you to perform a comprehensive analysis of the company's financial statements, including comparing Lydex's performance to its major competitors. The company's financial statements for the last two years are as follows:

Lydex Company  
 Comparative Balance Sheet

	This Year	Last Year
<b>Assets</b>		
Current assets:		
Cash	Tk. 960,000	Tk. 1,260,000
Marketable securities	0	300,000
Accounts receivable, net	2,700,000	1,800,000
Inventory	3,900,000	2,400,000
Prepaid expenses	<u>240,000</u>	<u>180,000</u>
Total current assets	7,800,000	5,940,000
Plant and equipment, net	<u>9,300,000</u>	<u>8,940,000</u>
Total assets	Tk. <u>17,100,000</u>	Tk. <u>14,880,000</u>
<b>Liabilities and Stockholders' Equity</b>		
Liabilities:		
Current liabilities	Tk. 3,900,000	Tk. 2,760,000
Note payable, 10%	<u>3,600,000</u>	<u>3,000,000</u>
Total liabilities	<u>7,500,000</u>	<u>5,760,000</u>
Stockholders' equity:		
Common stock, Tk.78 par value	7,800,000	7,800,000
Retained earnings	<u>1,800,000</u>	<u>1,320,000</u>
Total stockholders' equity	<u>9,600,000</u>	<u>9,120,000</u>
Total liabilities and stockholders' equity	Tk. <u>17,100,000</u>	Tk. <u>14,880,000</u>

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Lydex Company  
Comparative Income Statement and Reconciliation

	This Year	Last Year
Sales (all on account)	Tk.15,750,000	Tk.12,480,000
Cost of goods sold	<u>12,600,000</u>	<u>9,900,000</u>
Gross margin	3,150,000	2,580,000
Selling and administrative expenses	<u>1,590,000</u>	<u>1,560,000</u>
Net operating income	1,560,000	1,020,000
Interest expense	<u>360,000</u>	<u>300,000</u>
Net income before taxes	1,200,000	720,000
Income taxes (30%)	<u>360,000</u>	<u>216,000</u>
Net income	840,000	504,000
Common dividends	<u>360,000</u>	<u>252,000</u>
Net income retained	480,000	252,000
Beginning retained earnings	<u>1,320,000</u>	<u>1,068,000</u>
Ending retained earnings	Tk. <u>1,800,000</u>	Tk. <u>1,320,000</u>

To begin your assignment you gather the following financial data and ratios that are typical of companies in Lydex Company's industry:

Current ratio . . . . .	2.3
Acid-test ratio . . . . .	1.2
Average collection period . . . . .	30 days
Average sale period . . . . .	60 days
Return on assets . . . . .	9.5%
Debt-to-equity ratio . . . . .	0.65
Times interest earned ratio . . . . .	5.7
Price-earnings ratio . . . . .	10

**Required:**

You decide first to assess the company's performance in terms of debt management and profitability. Compute the following for both this year and last year:

- (i) The times interest earned ratio.
- (ii) The debt-to-equity ratio.
- (iii) The gross margin percentage.
- (iv) The return on total assets. (Total assets at the beginning of last year were Tk.12,960,000.)
- (v) The return on equity. (Stockholders' equity at the beginning of last year totaled Tk.9,048,000.)
- (vi) There has been no change in common stock over the last two years.)
- (vii) Is the company's financial leverage positive or negative? Explain.

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2. Dingel Corporation has contracted with you to prepare a statement of cash flows. The controller has provided the following information.

	December 31	
	2014	2013
Cash	Tk. 38,500	Tk.13,000
Accounts receivable	12,250	10,000
Inventory	12,000	10,000
Investments	–0–	3,000
Buildings	–0–	29,750
Equipment	40,000	20,000
Copyrights	<u>5,000</u>	<u>5,250</u>
Totals	Tk. <u>107,750</u>	Tk. <u>91,000</u>
Allowance for doubtful accounts	Tk. 3,000	Tk. 4,500
Accumulated depreciation—equipment	2,000	4,500
Accumulated depreciation—buildings	–0–	6,000
Accounts payable	5,000	4,000
Dividends payable	–0–	5,000
Notes payable, short-term (nontrade)	3,000	4,000
Long-term notes payable	36,000	25,000
Common stock	38,000	33,000
Retained earnings	<u>20,750</u>	<u>5,000</u>
	Tk. <u>107,750</u>	Tk. <u>91,000</u>

Additional data related to 2014 are as follows.

- (i) Equipment that had cost Tk.11,000 and was 30% depreciated at time of disposal was sold for Tk.2,500.
- (ii) Tk.5,000 of the long-term note payable was paid by issuing common stock.
- (iii) Cash dividends paid were Tk.5,000.
- (iv) On January 1, 2014, the building was completely destroyed by a flood. Insurance proceeds on the building were Tk.33,000 (net of Tk.4,000 taxes).
- (v) Investments (available-for-sale) were sold at Tk.1,500 above their cost. The company has made similar sales and investments in the past.
- (vi) Cash and long-term note for Tk.16,000 were given for the acquisition of equipment.
- (vii) Interest of Tk.2,000 and income taxes of Tk.5,000 were paid in cash.

**Required:**

Use the indirect method to analyze the above information and prepare a statement of cash flows for Dingel.

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3. (a) Outline the accounting procedures involved in applying the operating method by a lessor.
- (b) Phoenix Leasing Company leases a new machine that has a cost and fair value of Tk.95,000 to Shahriar Corporation on a 3-year non-cancelable contract. Shahriar Corporation agrees to assume all risks of normal ownership including such costs as insurance, taxes, and maintenance. The machine has a 3-year useful life and no residual value. The lease was signed on January 1, 2017. Phoenix Leasing Company expects to earn a 9% return on its investment. The annual rentals are payable on each December 31.

***Required:***

- (i) Discuss the nature of the lease arrangement and the accounting method that each party to the lease should apply.
- (ii) Prepare an amortization schedule that would be suitable for both the lessor and the lessee and that covers all the years involved.

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MBA Program  
Semester 182 (4<sup>th</sup> Level)

Course: Strategic Management Accounting

Due on: December 6, 2019

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**Questions**

1. (a) What is meant by Strategic Management Accounting?  
(b) Briefly describe six sigma.  
(c) Describe the business performance factors and their influence on management and Management Accounting.
2. The Cardiac Care Department at St. Andrew's General Hospital has a capacity of 70 beds and operates 24 hours a day year-around. The measure of activity in the department is patient-days, where one patient-day represents one patient occupying a bed for one day. The average revenue per patient-day is Tk. 240 and the average variable cost per patient-day is Tk. 90. The fixed cost of the department (not including personnel costs) is Tk. 13,70,000.

The only personnel directly employed by the Cardiac Care Department are aides, nurse, and supervising nurses. The hospital has minimum staffing requirements for the department based on total annual patient-days in Cardiac Care. Hospital requirements, beginning at the minimum expected level of activity, follow:

Annual Patient-Days	Aides	Nurses	Supervising Nurses
10,000-12,000 .....	7	15	3
12,001-13,750 .....	8	15	3
13,751-16,500 .....	9	16	4
16,501-18,250 .....	10	16	4
18,251-20,750 .....	10	17	5
20,751-23,000 .....	11	18	5

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These staffing levels represents full-time equivalents, and it should be assumed that the Cardiac Care Department always employs only the minimum number of required full-time equivalent personnel.

Average annual salaries for each class of employee are: aides, Tk. 18,000; nurses, Tk.29,000; and supervising nurses, Tk. 38,000.

**Required:**

- (a) Compute the total fixed costs (including the salaries of aides, nurses, and supervising nurses) in the Cardiac Care Department for each level of activity shown above (i.e. total fixed costs at the 10,000 – 12,000 patient-day level of activity, total fixed costs at the 12,001 – 13,750 patient-day level of activity, etc.)
  - (b) Compute the minimum number of patient-days required for the Cardiac Care Department to break even.
  - (c) Determine the minimum number of patient-days required for the Cardiac Care Department to earn an annual ‘profit’ of Tk. 360,000.
3. (a) What is meant by the term *sales mix*? What assumption is usually made concerning sales mix in CVP analysis?
- (b) Topper Sports, Inc., produces high-quality sports equipment. The company’s Racket Division manufactures three tennis rackets – the Standard, the Deluxe, and the Pro – that are widely used in amateur play. Selected information on the rackets is given below:

	<b>Standard</b>	<b>Deluxe</b>	<b>Pro</b>
Selling price per racket .....	Tk.40.00	Tk.60.00	Tk.90.00
Variable expenses per racket:			
Production .....	22.00	27.00	31.50
Selling (5% of Selling price) .....	2.00	3.00	4.50

All sales are made through the company’s own retail outlets. The Racket Division has the following fixed costs:

	Per Month
Fixed production cost .....	Tk.120,000
Advertising expense .....	100,000
Administrative salaries .....	<u>50,000</u>
Total .....	<u>Tk.270,000</u>

Sales, in units, over the past two months have been as follows:

	<b>Standard</b>	<b>Deluxe</b>	<b>Pro</b>	<b>Total</b>
April .....	2,000	1,000	5,000	8,000
May .....	8,000	1,000	3,000	12,000

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**Required:**

- (i) Using the contribution approach, prepare an income statement for April and an income statement for May, with the following headings:

<u>Standard</u>	<u>Deluxe</u>	<u>Pro</u>	<u>Total</u>
<u>Amount Percent</u>	<u>Amount Percent</u>	<u>Amount Percent</u>	<u>Amount Percent</u>

Sales.....  
Etc. ....

4. (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

<b>Assets</b>	<b>Ending Balance</b>	<b>Beginning Balance</b>
	Tk. 130,000	Tk. 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>Tk. 2,600,000</u>	<u>Tk. 2,530,000</u>
Liabilities and Stockholder's Equity		
Accounts payable	Tk. 340,000	Tk. 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>Tk. 2,600,000</u>	<u>Tk. 2,530,000</u>

BRIDGER, INC.

Income Statement

Sales	Tk. 4,180,000
Less operating expenses	3,553,000
Net operating income	627,000
Less interest and taxes:	
Interest expense	Tk. 120,000
Tax expense	<u>200,000</u>
Net operating income	<u>Tk. 307,000</u>

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

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***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?

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**Bangladesh Open University**  
MBA Program  
Semester 182 (4<sup>th</sup> Level)

Course: Strategic Management Accounting

Due on: 31 January, 2020

(Assignment is to be presented in own handwriting on A4 size white pages)

1. (a) What are the three basic approaches to improving return on investment (ROI)?
- (b) Comparative data on three companies in the same industry are give below:

	Company		
	A	B	C
Sales.....	Tk.4,00,000	Tk.1,500,000	Tk. ?
Net operating income .....	560,000	210,000	?
Average operating assets .....	2,000,000	?	3,00,000
Margin .....	?	?	3.5%
Turnover .....	?	?	2
ROI	?	7%	?

**Required:**

1. What advantages can you see in breaking down the ROI computation into two separate elements, margin and turnover?
  2. Fill in the missing information above, and comment on the relative performance of the three companies in as much detail as the data permit. Make specific recommendations on steps to be taken to improve the return on investment, where needed.
2. “That old equipment for producing subassemblies in worn out,” said Paul Taylor, president of Timkin Company. “We need to make a decision quickly,” The company is trying to decide whether it should rent new equipment and continue to make its subassemblies internally or whether it should discontinue production of its subassemblies and purchase them from an outside supplier. The alternative follow:  
Alternative 1: New equipment for producing the subassemblies can be rented for Tk. 60,000 per year.  
Alternative 2: The subassemblies can be purchased from an outside supplier who has offered to provide them for Tk. 8 each.  
Timkin Company’s present costs per unit of producing the subassemblies internally (with the old equipment) are given below. These costs are based on a current activity level of 40,000

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subassemblies per year:

Direct materials .....	Tk. 2.75
Direct labor .....	4.00
Variable overhead .....	0.60
Fixed overhead (Tk. 0.75 supervision, Tk. 0.90 depreciation, and Tk.2 general company overhead) .....	<u>3.65</u>
Total cost per unit .....	<u>Tk. 11.00</u>

The new equipment would be more efficient and, according to the manufacturer, would reduce direct labor costs and variable overhead costs by 25%. Supervision cost (Tk. 30,000 per year) and direct materials cost per unit would not be affected by the new equipment. The new equipment's capacity would be 60,000 subassemblies per year.

The total general company overhead would be unaffected by this decision.

**Required:**

- (1) The president is unsure what the company should do and would like an analysis showing what unit costs and what total costs would be under each of the two alternatives given above. Assume that 40,000 subassemblies are needed each year. Which course of action would you recommend to the president?
  - (2) Would your recommendation in (1) above be the same if the company's needs were (a) 50,000 subassemblies per year, or (b) 60,000 subassemblies per year? Show computation in good form.
  - (3) What other factors would you recommend that the company consider before making a decision?
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:

	<b>Project Number</b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Investment required--	Tk. (480,000)	Tk. (360,000)	Tk. (270,000)	Tk. (450,000)	Tk. (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>Tk. 87,270</u>	<u>Tk. 73,400</u>	<u>Tk. 66,140</u>	<u>Tk. 72,970</u>	<u>Tk. 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.

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- c. Internal rate of return.
3. Which ranking do you prefer? Why?

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**Bangladesh Open University**  
**MBA Program**  
**Semester: 182 (4<sup>th</sup> Level-Major AIS)**

**Course: Accounting Information Systems**

**Due on: December 6, 2019**

***Instructions for Assignment Submission***

1. Answer all questions in your own handwriting on A4 size white paper.
2. Fill-in the cover page (see page#8 of Semester Calendar) of your assignment with care.
3. Submit the assignment to the study centre coordinator or his delegate and ensure his/her signature on your Assignment Acknowledgement Form (see page#9 of Semester Calendar).
4. Don't make spiral binding. Instead, make soft binding.
5. Send a mail with your ID Number and Level to **mbacoordinator.bou@gmail.com** with subject "Add Me", if your e-mail address is not yet added to our e-mail list.
6. Don't copy from another student's assignment. If it is noticed that your assignment is copied from another student's assignment, your assignment will automatically be cancelled.

**Questions**

- 1.(a) What is the relationship among data, information, and an information system?  
 (b) What three roles are played by accountants with respect to the information system?  
 (c) Discuss the difference between the financial reporting system and general ledger system.
- 2.(a) What three transaction cycles exist in all businesses?  
 (b) Computer-based systems employ four types of files. Narrate them.  
 (c) If an organization processes large numbers of transactions that use common data records, what type of system would work best (all else being equal)?
- 3.(a) Give two examples of employee fraud and explain how the thefts might occur.  
 (b) Why are the computer ethics issues of privacy, security, and property ownership of interest to accountants?  
 (c) Explain the problems associated with inappropriate accounting practices.
- 4.(a) What function does the receiving department serve in the revenue cycle?  
 (b) What are the key features of a POS system?  
 (c) In a manual accounting system, what advantage does the journal voucher system have over the traditional general journal system?

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**Bangladesh Open University**  
**MBA Program**  
**Semester: 182 (4<sup>th</sup> Level-Major AIS))**

**Course: Accounting Information Systems**

**Due on: January 31, 2020**

**(Assignment is to be presented in own handwriting on A4 size white pages)**

1. Out Camping is a manufacturer of supplies and has several divisions, one of which is the tent division that produces the deluxe tent Away From Home. Fourteen thousand of these tents are made each year. This model of tent incorporates two zipping doors in each model. Zippers for these doors are purchased from Zippy Zippers. Out Camping began this year with 500 zippers in inventory, but is now adopting an EOQ approach to inventory. A review of last year's records reveals the following information concerning each order placed with Zippy Zippers: variable labor—\$12; variable supplies—\$1; fixed computer costs— \$4; fixed office expenses—\$2; fixed mailing expenses—\$2; and fixed supplies—\$1. No differences are expected this year. Last year, the cost of carrying one zipper in inventory for the entire year was \$1, but Out Camping has recently negotiated a new lease on its ware- house, and the cost of carrying each zipper is now expected to increase by 25 cents. Out Camping also found that it took seven days from the time an order was sent to Zippy until the zippers were received.

**Required:**

- (a) Compute EOQ.
  - (b) Compute ROP. Presume Out Camping has a desire to reduce its ending inventory to one-half of this year's beginning amount and that the company produces the Away From Home model 140 days each year.
2. How are journal vouchers used as a control mechanism?
    - (a) When are adjusting entries made to the work-sheet and what is their purpose? When are the corresponding voucher entries made?
    - (b) Explain how a data warehouse database is fundamentally different from a transaction processing database.
    - (c)
  3. Explain five general duties of the database administrator.
    - (a) In a relational database environment, certain accounting records (for example, journals, subsidiary ledgers, and event general ledger accounts) may not exist. How is this possible?
    - (b)
  4. Explain the relationship between cardinality and association.
    - (a) Why are traditional accounting events such as recording a transaction in a journal or posting to ledgers not modeled in REA diagrams?
    - (b)

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**Bangladesh Open University**  
**MBA Program**  
**Semester: 182 (4<sup>th</sup> Level-Major AIS)**

**Course: Accounting for Governmental and Non-Profit Organizations      Due on: December 6, 2019**

***Instructions for Assignment Submission***

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**Questions**

1. (a) What are the principal characteristics that distinguish governmental and not-for-profit entities from business enterprises?  
 (b) In your own words state the primary uses the GASB believes external users have for financial reports of state and local governments. Compare and contrast these with the uses the FASB believes external users have for financial reports of not-for-profit entities.
2. (a) What is the technical meaning of the term fund in governmental accounting?  
 (b) "Governmental fund expenditures should be recognized in the accounting period in which the fund liability occurs." Is this statement true or false? Explain your answer.  
 (c) Gazipur Pouroshova issued a 3-year, 6 percent note in the amount of Tk.200,000 to finance the purchase of vehicles for the Public Works Department.

***Required :***

- (i) Record the issuance of the Tk.200,000 note in the General Fund and the governmental activities general journals.
  - (ii) Record the purchase of vehicles in the amount of Tk.200,000 in the General Fund and governmental activities general journals.
  - (iii) Explain why the accounting treatment is different in the General Fund and governmental activities general journals.
3. (a) At the end of fiscal year 2018. budgetary and operating statement control accounts in the general ledger of the General Fund of the City of Adams had the following balances: Appropriation, Tk.5,224,000; Estimated Other Financing Uses, Tk.2,776,00; Estimated Revenues, Tk. 7,997,000; Encumbrances, Tk. 5,182,000; Other Financing Uses, Tk. 2,780,000; and Revenues, Tk. 8,022,000. Appropriations Included and authorization to order a certain item at a cost not to exceed Tk. 64, 700; this was not ordered during 2018 because it will not be available until late in the following year, 2019. Show in general journal form the entry needed to close all of the accounts listed above that should be closed as of the end of the fiscal year 2019.

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- (b) The following is a list of the ledger accounts of the General Fund of Quincy as of June 30, 2019 (the fiscal year ends on December 31):

Accounts Payable	Tk. 352,600
Appropriations	2,663,400
Cash	284,600
Due to Other Funds	16,800
Encumbrances	117,000
Estimated Revenues	2,670,000
Estimated Uncollectible Current Taxes	69,000
Expenditures – 2019	1,385,900
Reserve for Encumbrances – 2019	117,000
Revenues	1,420,400
Tax Anticipation Notes Payable	540,000
Taxes Receivable – Current	898,500
Fund Balance	?

***Required***

- (i) Determine the balance of the Fund Balance account as of June 30, 2019, without preparing a balance sheet or closing entries. Show computations.
- (ii) Prepare in good form an Interim Balance Sheet as of June 30, 2019.
- (iii) If the only entry recorded in the Fund Balance account during the first six months of 2019 was to record the original budget for the year, compute the balance of the Fund Balance account that would have been reported in the General Fund Balance Sheet as of December 31, 2018.

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**Bangladesh Open University**  
**MBA Program**  
**Semester: 182 (4<sup>th</sup> Level-Major AIS)**

**Course: Accounting for Governmental and Non-Profit Organizations      Due on: January 31, 2020**

**(Assignment is to be presented in own handwriting on A4 size white pages)**

1. (a) Under what circumstances might a government consider an advance refunding of general obligation bonds outstanding?
- (b) Following are a number of unrelated transactions for K-Town, some of which affect governmental activities at the government wide level. None of the transactions has been recorded yet.
  1. The General Fund collected Tk. 825,000 in accrued taxes, which was transferred to the debt service fund; Tk. 600,000 of this amount was used to retire outstanding serial bonds and the remainder was used to make the interest payment on the outstanding serial bonds.
  2. A Tk. 5,000,000 issue of serial bonds to finance a capital project was sold at 102 plus accrued interest in the amount of Tk. 50,000. The accrued interest and the premium were recorded in the debt service fund. Accrued interest on bonds sold must be used for interest payments; the premium is designated by state law for eventual payment of bond principal.
  3. The debt service fund made a Tk. 110,000 capital lease payment, of which Tk. 15,809 was interest. Funds used to make the lease payment came from a capital grant received by the special revenue fund.
  4. Tax-supported serial bonds with a Tk. 2,800,000 par value were issued in cash to permit partial refunding of a Tk. 3,500,000 par value issue of term bonds. The difference was settled with Tk. 700,000 that had been accumulated in prior years in a debt service fund. Assume that the term bonds had been issued several years earlier at par.

***Required***

Prepare in general journal form the necessary entries in the governmental activities and appropriate fund journals for each transaction. Explanations may be omitted. For each entry you prepare, name the fund in which the entry should be made.

2. (a) Explain the difference between a private-purpose trust and a public-purpose trust. How does the reporting for the two types of trusts differ?
- (b) St. George County has entered into a contract for the demolition and construction of a six-lane bridge. It is expected that the project will take three years to complete. The terms of the contract indicate that the county will retain 5 percent (retained percentage) from each progress billing. The contract also requires that the retained percentage be invested and accounted for in a separate fund. Investment of the retained percentage is for the benefit of the contractor, who will receive the retained percentage and investment earnings upon successful completion and acceptance of the bridge.

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**Required**

- a. What type of fund should St. George County use to account for the retained percentage? Explain your answer.
  - b. Record the following events in the retained percentage fund.
    1. A retained percentage was withheld from a progress payment of Tk. 900,000.
    2. The retained percentage was invested in certificates of deposit.
    3. Interest of Tk. 675 was received.
    4. At year-end, interest of Tk. 1,350 was accrued. There was no adjustment to fair value.
    5. Nominal accounts were closed.
3. (a) What are some of the accounting and reporting differences between endowments and split-interest agreements?
- (b) Elizabeth College, a small private college, had the following transactions in fiscal year 2018.
1. Billings for tuition and fees totaled Tk. 5,600,000. Tuition waivers and scholarships of Tk. 61,500 were granted. Students received tuition refunds of Tk. 101,670.
  2. During the year the college received Tk. 1,891,000 cash in unrestricted private gifts, Tk. 575,200 cash in temporarily restricted grants, and Tk. 1,000,000 in securities for an endowment.
  3. A pledge campaign generated Tk. 626,000 in unrestricted pledges, payable in fiscal year 2019.
  4. Auxiliary enterprises provided goods and services that generated Tk. 94,370 in cash.
  5. Collections of tuition receivable totaled Tk. 5,380,000.
  6. Unrestricted cash of Tk. 1,000,000 was invested.
  7. The college purchased computer equipment at a cost of Tk. 10,580.
  8. During the year the following expenses were paid:

Instruction	Tk. 3,866,040
Academic support	1,987,000
Student services	87,980
Institutional support	501,130
Auxiliary enterprises	92,410
9. Instruction provided Tk. 450,000 in services related to the temporarily restricted grant recorded in transaction 2.
10. At year-end, the allowance for uncollectible tuition and fees was increased by Tk. 7,200. The fair value of investments had increased Tk. 11,540; of this amount, Tk. 3,040 was allocated to permanently restricted net assets, the remainder was allocated to unrestricted net assets. Depreciation on plant and equipment was allocated Tk. 34,750 to instruction, Tk. 41,000 to auxiliary enterprises, and Tk. 12,450 to academic support.
11. All nominal accounts were closed.

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***Required:***

- (i) Prepare journal entries in good form to record the foregoing transactions for the fiscal year ended June 30, 2018.
- (ii) Prepare a statement of activities for the year ended June 30, 2018. Assume beginning net asset amounts of Tk. 7,518,000 unrestricted, Tk. 200,000 temporarily restricted, and Tk. 5,000,000 permanently restricted.

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