B.Sc. Engg. / HD CSE 6th Semester

02 November 2018

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
Department of Computer Science and Engineering (CSE)

SEMESTER FINAL EXAMINATION **SUMMER SEMESTER, 2017-2018**

DURATION: 3 Hours **FULL MARKS: 150**

Hum 4641: Accounting

Programmable calculators are not allowed. Do not write anything on the question paper.

There are **8 (eight)** questions. Answer any **6 (six)** of them.

Figures in the right margin indicate marks. All questions carry equal marks.

1. So far, we have heard of the existence of three trial balances - the unadjusted trial balance, the adjusted trial balance and the post-closing trial balance. Explain the purpose of each, and indicate the types of account balances that are contained in each. 25

2. PQ Cabinet Ltd. merchandising organization operating in the Dhaka. The following data are for the Company. 25

PQ Cabinet Ltd.
Unadjusted trial Balance
For the year ended 31 December 2017

Account	Debit	Credit
Cash at bank	20,000	
Accounts receivable	1,26,400	
Inventory (1 January)	59,000	
Prepaid insurance	12,400	
Store equipment	1,08,060	
Accumulated depreciation-store equipment		25,660
Accounts payable		19,900
Loan payable		25,000
Share capital		60,000
Retained earnings		21,500
Dividends	31,780	
Sales		5,68,960
Sales return and allowances	14,610	
Discount received		1,070
Purchases	2,49,570	
Purchases returns and allowances		12,000
Freight inwards	4,120	
Sales salaries expenses	89,320	
Freight outwards	2,000	
Discount allowed	1,800	
Interest expense	2,130	
Loss on sale of store equipment	12,900	
Total	7,34,090	7,34,090

Use the following information to make the year-end adjustments.

- Prepaid insurance closing balance for the year Tk. 3,100.
- Depreciation on the store equipment Tk. 7,100.
- Accrued interest on the loan payable Tk. 1,200.
- Sales salaries expenses accrued Tk. 4,400.
- Corporate income tax rate is 25% for the period. The ending inventory determined by physical count was Tk. 65,000.

Prepare a multiple-step income statement, a statement of changes in equity and a statement of financial position for the year ended December 2017.

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3. The following cost and revenue data relate to Apex Shoe Company Bangladesh Ltd.:

	Per Pair of Shoes
Sales	Tk. 30.00
Variable expenses:	
Invoice cost	14.50
Sales commission	3.50
Fixed expenses:	
Advertising	20,000
Rent	30,000
Salaries	100,000

Answer the followings:

a) Calculate the annual break-even point in taka sales and in unit sales for the company.

b) If 16,000 pairs of shoes are sold in a year, what would be the company's net income or loss?

c) The company is considering paying the store manager an incentive commission of 90 paisa per pair of shoes(in addition to the salesperson's commission) if this change is made, what will be the new break-even point in take sales and in unit sales?

d) Refer to the original data. As an alternative to (3) above, the company is considering paying the sales manager 80 paisa commission on each pair of shoes sold in excess of the BEP. If this change is made, what will be the company's net income or loss if 15,000 pairs of shoes are sold?

e) Refer to the original data. If company planned to earn after tax profit of Tk. 2,100, how many pairs of shoes the company need to sell? [Tax rate (TR) is 30%].

f) Refer to the original data. If the company planned to earn after tax profit of Tk. 1,400, and sold 12,000 pairs of shoes, what will be the new price for each pair of shoe? (TR is 30%).

g) Refer to the original data. Compute the margin of safety in both Tk and percentage form if the company sold 15,000 pairs of shoes. Compute the degree of operating leverage at the sales level.

4. A Company is ready to begin its third quarter, in which peak sales occur. The company has required a Tk. 40,000, 90-days loan from its bank to help meet cash requirements during the quarter. Since the company has experienced difficulty in paying off its loans in the past, the loan officer at the bank has asked the company to prepare a cash budget for the quarter. In response to this request, the following data have been assembled: 25

- On July 1, the beginning of the third quarter, the company will have a cash balance of Tk. 44,500.
- Actual sales for the last two months and budgeted sales for the third quarter as follows:

	Tk.
May (actual)	2,50,000
June (actual)	3,00,000
July (budgeted)	4,00,000
August (budgeted)	6,00,000
September (budgeted)	3,20,000

Past experience shows that 25% of a month's sales are collected in the month of sales, 70% in the month following sales, and 3% in the second month following sales. The remainder is uncollectable.

- Budgeted merchandise purchases and budgeted expenses for the third quarter are given below:

	July	August	September
	Tk.	Tk.	Tk.
Merchandise purchase	2,40,000	3,50,000	1,75,000
Salaries	45,000	50,000	40,000
Advertising	1,30,000	1,45,000	80,000
Rent payment	9,000	9,000	9,000
Depreciation	10,000	10,000	10,000

Merchandise purchases are paid in full during the month following purchase. Accounts payable for the merchandises on June 30, which will be paid during July, total Tk. 1,80,000.

- Equipment costing Tk. 20,000 will be purchased for cash during July.
- Office furniture costing Tk. 30,000 will be purchased for credit during September.
- In preparing the cash budget, assume that Tk. 40,000 loan will be made in July and repaid in September. Interest on the loan will total Tk. 1,200.

Answer the followings:

a) Prepare a schedule of expected cash collections for July, August and September and for the quarter in total.

b) Prepare a cash budget by month and in total, for the third quarter.

c) If the company needs a minimum cash balance of Tk. 20,000 to start each month, can the loan be repaid as planned? Explain.

5. AB Company Ltd. has had great difficulty in controlling overhead costs. At a recent conversation, the president heard about a control device for overhead costs known as flexible budget, and he has hired you to implement this budgeting program in the company. After some effort, you develop the following cost formulas for the company's machining department. These costs are based on a normal operating range of 10,000 to 20,000 machine- hours per month: 25

Cost	Cost formula
Variable cost	
Utilities	0.80 per machine hour
Lubricants	0.75 per machine hour
Machine setup	0.25 per machine hour
Indirect labor	0.75 per machine hour
Fixed cost	
Depreciation	52,000 per month
Lubricants	12,000 per month
Indirect labor	22,000 per month

During March 2015, the first month after your presentation of the above data, the machining department worked 18,000 machine-hours and produced 9,000 units of product. The actual costs of this product were:

Utilities	Tk. 15,000
Lubricants	27,000
Machine set up	5,000
Indirect labor	36,000
Depreciation	52,000

There were no variances in the fixed costs. The department has originally been budgeted to work 20,000 machine-hours during March, 2015.

Answer the followings:

a) Prepare a flexible budget in increment of 5,000 machine hours.

b) Prepare an overhead performance report for the machining department for the month of March. Include both variable and fixed costs in the report. Show only is spending variance on the report.

c) Explain the causes of any unusual variances.

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6. a) What are the assumptions of CVP analysis?
   b) What are the content of a master budget? Explain briefly.
   c) Who are the users of accounting information? Explain briefly.

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7. a) How can accountants help small businesses?
   b) Identify the basic steps in the recording process.
   c) Explain the term *contra asset.*

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8. a) Why do accrual-basis financial statements provide more useful information than cash-basis statement?
   b) Indicate the effect of each of the following transactions upon any or all of the four financial statements of a business. Apart from indicating the financial statement(s) involved, use appropriate phrases such as "increase total assets", "decrease equity", "increase income", "decrease cash flow" to describe the transaction concerned.
      i. Purchase equipment for cash.
      ii. Provide services to a client, with payment to be received within 40 days.
      iii. Pay a liability.
      iv. Invest cash into the business for buying the shares of the company.
      v. Collect an account receivable in cash.