

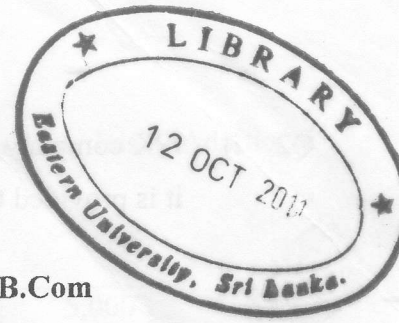
Eastern University, Sri Lanka

Faculty of Commerce & Management

Third Year First Semester Examination in BBA/ B.Com

2009/2010 (August 2011) (Proper)

MGT 3013 - Managerial Accounting



Calculator is permitted

Answer all questions

Time: 03 Hours

- Q1 Product X in a manufacturing unit passes through three process-A, B and C. The expenses incurred in the three processes during the year 2006 were as follows:

Units of input issued	Process A	Process B	Process C
	9,000		
Cost per unit	150	-	-
Sundry materials	23,500	25,000	15,000
Direct Labour	80,000	2,07,200	26,110
Direct expenses	2,250	7,200	8,100
Selling price per unit of output	200	280	600

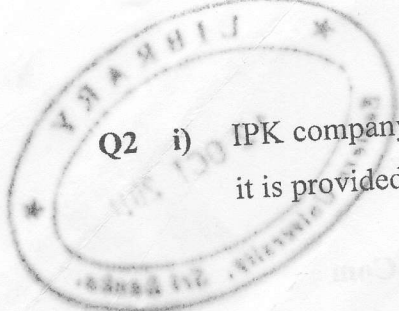
The actual outputs obtained vis-à-vis normal process losses from the three processes were:

Process	Output (Units)	Process loss (%)
A	8,400	5
B	5,700	10
C	3,660	3

During the year, three-fourth of the output of process A and two-third of the output of process B were transferred to the next process and the balances were sold outside. The entire output of process C was, however, sold outside. The losses of the three processes were sold at Rs. 5 per unit for process A, Rs. 10 per unit for process B and Rs. 15 per unit for process C.

Prepare the three Process Accounts and a Statement of Income considering a total selling and distribution expenses of Rs. 45,000, which is not allocated to process.

(Total 20 Marks)



**Q2 i)** IPK company produces 3 products A, B and C. the following information related it is provided to you.

	A	B	C
	Rs.	Rs.	Rs.
Selling price per unit	225	400	750
Direct material cost per unit (Rs. 10/- @ per kg)	100	160	400
Direct labour cost per unit (Rs. 15/- @ per direct labour hour)	60	90	180
Annual sales in units	20,000	15,000	14,000
Closing finished stock	6,000	5,000	3,000

The stock level of raw material 'X' at the end of the year is 240,000 kg.

According to the forecast made for the year, sales are expected to be increased by 20% of three products. The company also expects to increase the stock levels of the direct material 'X' and finished goods A, B and C by 10% at the end of next year.

You are required to prepare the following for the next year.

1. Sales budget
2. Production budget
3. Direct material usage budget
4. Direct material purchase budget
5. Direct labour budget

(15 Marks)

**ii)** Comment on the difference between incremental budgeting and Zero Based Budgeting.

(05 Marks)

(Total 20 Marks)

**Q3 i)** Given below are the standard costs per unit of product X of JB company.

	Rs.
Direct material (20kg @ Rs. 10/-)	200
Direct labour (10 hours @ Rs. 15/-)	150
Variable overhead	80
Fixed overhead	100
	<u>530</u>

Fixed and variable overhead are absorbed on direct labour hour basis. Additional information for the month of July 2011 is given below

Opening work in progress (40% complete)	5,000
Closing work in progress (70% complete)	8,000
Finished	10,000
Raw material used for production (kg)	275,000
Direct labour hours involved in production	140,000

Raw materials are added at the start of the production process while the translation cost is incurred through the production process.

The company uses FIFO method for stock valuation.

You are required to compute following variances.

1. Direct material usage variance
2. Direct labour efficiency variance
3. Variable overhead efficiency variance
4. Fixed overhead volume variance

**(12 Marks)**

- ii) Kumar company produces two products of X and Y. A special order of 15,000 units of X was received. The fixed cost of the company is not being changed due to the acceptance of this order. If this order is accepted 3 units of product Y already produced by the company will have to be dropped to produce one unit of this order as the labour is restricted.

Variable cost and the selling price of the each product are as follows:

	X	Y
Selling price (Rs.)	25	20
Variable Cost (Rs.)	15	12

You are required to compute the cost in relation to this decision.

**(08 Marks)**

**(Total 20 Marks)**



Q4

Shiva Company Limited is implementing a development project of mini hydro power plant in the Hatton Estate which belonged to the company. The power plant is being developed with a capacity of 1Mw. The electricity power generated from the plant is utilized for the factory at tea estate and the surplus power will be sold to national electricity power under the agreement made with the Ceylon Electricity Board. The plant is expected to be implemented continuously over the year and the expected time is 15 years. (15 years from the year 2)

The estimated investment for the plant is Rs. 100 million. It is expected to take at least a year for the development of the plant and the commercial operation is commenced from the 2<sup>nd</sup> year. 20% of total investment cost should be incurred without delay and the balance is to be incurred in uniformly during the first year. The electrical power is generated by the plant for a year is 3,750 mega watts hours (Mw hours).

It is considered that 10% of electricity power is consumed by the tea factory and the balance is to be sold to the Ceylon Electricity Board. At the moment tea factory pays Rs.7/50 per KW hour to the Ceylon Electricity Board for its consumption and the Electricity Board purchases electricity at a rate Rs. 6/- per 1 Kw hour from the private electricity plants.

Operating maintenance cost of the plant is estimated as 5% of the annual turnover (from the total cash receipts). Cost of insurance of the plant and maintenance will be 1% of the annual turnover.

$$1\text{Mw} = 1000 \text{ Kw}$$

You are required to, Compute the Net Present Value and the Internal Rate of Return for the period of 15 years of the project and advise in respect of the feasibility of the project. Annual cost of capital of Shiva Company Limited is 15%.

(Total 20 Marks)

Q5

Assuming that a firm pays tax at a 50 percent rate, compute the after-tax cost of capital in the following cases:

1. An 8.5 percent preference share sold at par.

(03 Marks)

2. A perpetual bond sold at par, coupon rate of interest being 7 percent.

(03 Marks)

3. A ten-year, 8 percent, Rs.1000 par sold at Rs.950 less 4 percent underwriting commission.

(03 Marks)

4. A preference share sold at Rs.100 with a 9 percent dividend and a redemption price of Rs.110 if the company redeems it in five years.

(03 Marks)

5. An ordinary share selling at a current market price of Rs.120, and paying a current dividend of Rs.9 per share, which is expected to grow at a rate of 8 percent.

(04 Marks)

6. An ordinary share of a company, which engages no external financing, is selling for Rs.50. The earnings per share are Rs.7.50 of which sixty percent is paid in dividends. The company reinvests retained earnings at a rate of 10 percent.

(04 Marks)

(Total 20 Marks)