EASTERN UNIVERSITY, SRI LANKA

FACULTY OF COMMERCE AND MANAGEMENT

THIRD YEAR/ FIRST SEMESTER EXAMINATION IN COMMERCE 2003/ 2004

(DECEMBER 2004)

COM 3014 MANAGEMENT ACCOUNTING

Answer all Questions **Time : 03 Hours**

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01. (i) Why is financial planning needed for good financial management?

(02 marks)

(ii) Distinguish between short and long term finance using examples within the framework of internal and external sources of finance.

(02 marks)

(iii) A proforma cost sheet of a company provides the following particulars:

		Amount per unit (Rs)
Elements of cost :		
	Raw materials	80
	Direct labour	30
Overheads		60
Total cost		170
Profit		30
Selling price		200

The following further particulars are available :

Raw materials in stock, on average, one month: materials in process (Completion stage, 50 percent) on average half a month: Finished goods in stock, on average, one month.

Credit allowed by suppliers is one month: Credit allowed to debtors is two months: Average time-lag in payment of wages is 1.5 weeks and one month in overhead expenses: one-fourth of the output is sold against cash: cash in hand and at bank is desired to be maintained at Rs. 365,000.

You are required to prepare a statement showing the working capital needed to finance a level of activity of 104,000 units of production. You may assume that production is carried on evenly throughout the year, and wages and overheads accrue similarly. For calculation purpose, 4 weeks may be taken as equivalent to a month.

(08 marks)

(iv) What is meant by capital gearing?

Discuss the advantages and disadvantages of high capital gearing using empirical examples in the following situations.

a. At a time of high profit

b. At a time of low profit.

(04 marks)

(v) Your marketing manager has made the following estimate of the demand at various potential prices for a product having a marginal cost of Rs. 100/-.

Price (RS)	200	190	180	170	160	150	140	130
Demand (Unit)	1,000	1,200	1,500	2,000	2,500	3,200	4,000	5,000

The fixed costs have been estimated as follows:

Units	Fixed Cost (Rs)
1,400	40,000/-
2,500	80,000/-
4,200	120,000/-
5,600	160,000/-

Determine the price that will provide the maximum net contribution.

(08 marks)

(vi) Kalappan Co. Ltd. is a highly automated company which produces Blue and Red ball point pens. Both are produced on the same machineries and use exactly similar processes. Details of the costs and other related information are given below.

	Ball point pens	
	Blue	Red
Machine hours per unit	2	2
Annual units of output	10,000	1,000
No. of purchase orders for raw materials	160	80
No. of sets ups	600	40

The costs of including overheads of the different activities identified in the process are given below.

Volume related activities	Rs. 110,000/-
Purchasing related activities	Rs. 120,000/-
Set up related activities	Rs. 210,000/-

Compute the product cost using Activity Based Costing system.

(08 marks)

(vii) A company is considering the alternatives of either importing a component or producing the component. The estimated costs to the company for producing the component are as follows.

	SLR
Direct material	3,000/-
Direct Labour	1,000/-
Variable overhead	500/-
Fixed overhead	2,000/-

The outside supplier has quoted a price of US \$ 50 at an exchange rate of 1 US \$ = 100 SLR.

The company is now operating at full capacity and the production of the component demands 20 extra machine hours and will reduce the production of an existing item, which yields a contribution of Rs. 100/- per machine hour.

Advise the management on the import or production of the component, with your reasons.

(08 marks)

(Total 40 marks)

02. Given below are summarised accounts of Alok Ltd, for the years 1 and 2.

Balance sheet (Rs '000)

		Year 1		Year 2
Liabilities :				
Share capital		250		250
General reserves		100		172
Debentures		180		150
Term loan		30		30
Creditors		70		56
		630		658
Assets :				
Fixed assets (at cost)	500		500	
Less accumulated depreciation	80		115	
Net fixed assets		420		385
Cash		55		85
Debtors		65		75
Inventories		90		113
		630		658

Income statement (Rs '000)

	Year 1	Year 2
Net sales	350	450
Less cost of sales	160	183
Gross profit	190	267
Less selling, general and administrative costs	50	60
Earnings before depreciation, interest and tax	140	207
Less depreciation	30	35
Earnings before interest and tax	110	172
Less interest	25	27
Earnings before tax	85	145
Less tax	15	48
Earnings after tax	70	97
Less dividend	25	25
Retained earnings	45	72

Compute the (i) liquidity, (ii) leverage, (iii) operational (iv) profitability ratios, and comment on the performance of the company.

(20 marks)

03. The following cost accounting report is available to the management for making a decision on what to produce during the coming year.

Product	A	B	C	D	E	F
Selling price/ unit (Rs)	1350	1770	1230	1290	1530	1350
Cost/ unit (Rs)						
Material	300	450	360	540	810	720
Labour	360	450	300	240	180	150
Variable overheads	90	90	90	90	90	90
Fixed overheads	360	450	300	240	180	150
Total cost	1110	1440	1050	1110	1260	1110
Profit per unit	240	330	180	180	270	240
Ranking	3	1	5	5	2	3
Estimated maximum demand	500	700	600	1000	400	600

Labour is all of one grade and paid Rs 30 per hour. The company can hire only 22,000 labour hours during the coming year. All other resources can be obtained in the desired quantities. Materials are valued at expected cost and none are held in stock at present. Fixed overheads are charged at 100% of labour cost under the absorption costing system of the company.

a. Criticize the costing report as a basis for product selection and suggest an output plan for the coming year. Indicate how confident you are that your suggestion is optimal.

(15 marks)

b. Suppose that the price of materials has increased dramatically during the past year and the company holds very large stocks purchased before the increase. Explain briefly how such materials should be valued for output decisions.

(05 marks)

(Total 20 marks)

04. a. Your organization has no system for authorizing and controlling capital expenditure. The Managing Director has asked you, as Cost Accountant, to review the situation.

Required To :

Draft a memorandum to your Board of Directors detailing a scheme for capital expenditure authorization and control, briefly explaining each stage in your system.

b. The following information relates to two possible capital projects of which you have to select one to invest in. Both projects have an initial capital cost of Rs. 200,000 and only one can be undertaken.

Project	Net Income X (RS)	Net Income Y (RS)
Year 1	80,000	30,000
2	80,000	50,000
3	40,000	90,000
4	20,000	120,000
Estimated resale value at the end of Year 4	40,000	40,000

i. Profit is calculated after deducting straight line depreciation.

ii. The cost of capital is 16%.

Required :

For both projects calculate the following :

i. The pay back period to one decimal place.

ii. The accounting rate of return using average investment.

iii. The net present value.

c. Advise the board which project in your opinion should be undertaken, giving reasons for your decision.

d. The board had looked at your proposal and you have been asked to clarify a number of issues :

i. What is meant by the term 'cost of capital' and why is it important in coming to an investment decision?

ii. State two ways in which risk can be taken into account when making a capital investment decision.

(Total 20 marks)