SOUTH EASTERN UNIVERSITY OF SRI LANKA
CENTRE FOR EXTERNAL DEGREES AND PROFESSIONAL LEARNING

SECOND YEAR EXAMINATIONS IN BACHILOR OF COMMERCE (EXTERNAL) – 2011/2012

HELD IN JUNE / JULY 2013

BCOM – 28 (II) Cost and Management Accounting – II

Calculator can be used. Time: 03 Hours

01. You have been appointed as cost Accountant at Supri Gas Co.Ltd. The Finance Director has requested you to urgently provide him answer for the following matters in order that he can table them at the weekly management meeting.

- Given that the cost standards are 20 liters and Rs. 15/= per liter, compute the variance when the actual are 24 liters at Rs. 21/= per liter.

(6 Marks)

- Find the variances where the cost standards are 100 direct labour hours and Rs. 24/= per hour and actual are 110 hours for costs of Rs. 2,310/=..

(6 Marks)

- Hydrogen Pent Oxide is prepared by mixing by Hydrogen and Oxygen in the proportions of 1:5 in HO5. The standard prices of these gases are Rs. 30/- and Rs. 3/- a cubic feet respectively. During the period 57,600 cubic feet oxygen were prepared. Compute the material mix variance.

(8 Marks)
(Total 20 Marks)

02. Lambada ltd. wishes to manufacturer a new product which would involve the use of new machine costing Rs. 150,000/- and the existing machine which cost Rs. 80,000 and now has a book value of Rs. 60,000/-. There is sufficient capacity on this machine which has so far been underutilized.

Annual sales of the product would be 5,000 units at a selling price of Rs. 32/- per unit. Unit cost would be as follows.

	Rs.
Direct Labour 4 hrs @ 2/- per hr.	8
Direct material	7
Fixed costs	9
	24

The project would have a 5 years life, after which the machine would have net residual value of Rs. 10,000/-.

As direct labour is in short supply, labour which have to be diverted from other work which currently earns a contribution of Rs. 1.50 per direct labour hour. The fixed overhead absorption rate would be Rs. 2.25 per hour (i.e. Rs. 9/- per unit) but actual expenditure on fixed overhead would not alter.

Working capital requirement would be Rs. 10,000/- at the commencement of the project and would increase to Rs. 15,000/- at the begging of the 2nd year and would remain in that level until the end of that year when it would be recovered in full.

The company's cost of capital is 20%. Ignore tax and inflation.

Required:

Should the project be accepted? Support your recommendation with working.

DCF – Table

Year	20%
1	0.833
2	0.694
3	0.579
4	0.482
5	0.402
6	0.335

(20 Marks)

03. XYZ Ltd. Manufactures products P,Q and R. The number of units sold of P, Q and R is in the ratio of 2:1:3. The total monthly manufacturing capacity of XYZ Ltd is 150,000 units (total of all products) and the total expected monthly sales are 84,000 units.

The budgeted data for each product is as follows:

Product	**P (Rs.)**	**Q (Rs.)**	**R(Rs.)**
Selling Price	75	90	150
Direct Material	15	20	50
Direct Labour	15	25	20
Variable Overhead	15	15	25
Variable Sales Commission	10	15	25

The budgeted monthly fixed costs are as follows.

Manufacturing	Rs.	700,000
Administration	Rs.	600,000
Advertisements	Rs.	300,000
		1,600,000

You are required:

(a) Calculate C/S ratio and construct multi product profit graph and show breakeven point and margin of safety on the graph clearly.

(8 Marks)

(b) Determine the maximum monthly fixed advertisement cost increase which could be accommodated in expectation of 20% increase in expected monthly sales. Assume that sales piece and all other fixed costs will remain unchanged.

(6 Marks)

(c) Indicate based on the original price/cost structure, the preference for production of P,Q and R under each of the following constraints assuming that there is no requirement to maintain a particular sales mix.

Total sales value is the limitation

Raw material availability is the limitation

Labour availability is the limitation.

(6 Marks)

(Total 20 Marks)

04. World-cup Ltd. is engaged in manufacturing tennis balls and leather balls. Sales department of the company has projected sales for the month of April and May as follows.

	Tennis ball		Leather Balls	
	April	**May**	**April**	**May**
Sale Qty.	12,200	11,000	10,200	9,000
Unit Price (Rs.)	200	200	400	400

Following additional information is also available:

	Material		
	Rubber	**Leather**	**Treads**
Unit Cost (Rs.)	40	30	20
Materials used in products (per ball)			
Leather Ball	2 units	3 units	1 unit
Tennis Ball	1 unit	2 units	---
Required stock of materials as at 30 April	550 units	600 units	400 units
Opening stock of materials – budgeted 1st April	300 units	444 units	100 units

10% of the leather will be lost during the processing.

Direct labours requirement for a tennis ball and a leather ball is 15 minutes and 30 minutes respectively.

Cost of one direct labour hour is Rs. 120.

Finished goods stocks at the end of a month are maintained at 25% of the sales of the following month.

Required:

Prepare following budgets for the month of April

- Production budget

(7 Marks)

- Material purchase budget

(7 Marks)

- Direct labour budget

(8 Marks)

(Total 20 Marks)

(5). A company has prepared its production overhead budget based on budgeted production of 8,000 units each month. Due to fluctuation in actual production, however, the company has difficulty in comparing in actual overheads with budgeted overheads.

It has therefore decided to prepare flexible budgets.

Monthly budgeted production overhead of 8,000 units is given below.

Fixed	**Rs.**
Rent	20,000
Salaries	27,000
Depreciation of Machinery	6,000
Variable	
Overtime	2,000
Power & Water	14,200
Production consumption	5,200

Semi Variable

Insurance (Fixed premium is Rs. 2,000)	3,200
Royalty (40% variable)	7,000

Maintenance of machine – budgeted figures are based on actual expenditure in the previous months.

Month	Production (Units)	Maintenance Costs (Rs.)
January	8,200	4,140
February	7,500	4,000
March	9,300	4,360
April	5,200	3,540

Prepare a flexible budget for the monthly production level of Rs. 10,000, 12,000 and 15,000 units.

(20 Marks)