THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

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SCHOOL OF ACCOUNTING AND BUSINESS
BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE PROGRAMME

YEAR I SEMESTER II – INTAKE VI (GROUP A)
END SEMESTER EXAMINATION – JANUARY 2017

AFM 10330 Intermediate Management Accounting

Date	:	09th January 2017
Time	:	9.00 a.m. - 12.00 p.m.
Duration	:	Three (03) hours

Instructions to Candidates:

- Answer **ALL** questions.
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Formula Sheet is provided.
- Use of scientific calculator is allowed.
- Answers should be written neatly and legibly.

Question No. 01

Kent Constructions is offered 2 contracts on the same day. Details are as follows.

Contract		**A**	**B**
Promise total profit	Rs. Mn.	9	12
Duration	years	3	5
Total cost	Rs. Mn.	10	10
Scrap value		Nil	Nil

Which of the two contracts would you recommend? Why?

(03 marks)

i. What is meant by the following terms?
   a. Time value of money
   b. Profitability index

(06 marks)

ii. Lanka Traders, is considering purchase of a computer aided manufacturing system. The annual after tax cash benefits associated with the system are as follows:

Decrease of waste	Rs. 300 000
Increase of quality	Rs. 400 000
Decrease in operating cost	Rs. 600 000
Increase in on – time deliveries	Rs. 200 000

The system will cost Rs. 3 Mn and economic viability of this project is estimated for 3 years. The company's cost of capital is 10%

Required:

a. Payback period.
b. Net Present Value
c. Internal Rate of Return
d. Should the system be purchased? Justify it.

(16 marks)

(Total 25 marks)

Question No. 02

The budgeted production of a company is 20,000 units per month. The standard cost sheet is as follows:

Direct materials	1.5kg @ Rs. 6 per kg
Direct labour	6 hours @ Rs. 5 per hour
Variable overheads	6 hours @ Rs. 4 per hour
Fixed overheads	Rs. 3 per unit
Selling price	Rs. 72 per unit

The following are the actual details for the month:

- Actual production and sales, 18,750 units
- Direct material consumed, 29,860 kg. at Rs. 5.25 per kg
- Direct labour hours worked, 118,125 hours at Rs. 6 per hour
- Actual overheads Rs. 525,000 of which a sum of Rs. 40,000 was fixed
- There is no change in the selling price

Required:

i. Direct Materials Usage and Price Variances
ii. Direct Labour Efficiency and Rate Variances
iii. Variance Overheads Efficiency and Expense Variances
iv. Fixed Overhead Volume and Expense Variances
v. Sales Volume Variance and Gross Margin

(Total 25 marks)

Question No. 03

i. 'Budgets can be used for planning as well as controlling activities of an organisation'. Explain with an example.

(05 marks)

ii. Differentiate between a 'fixed budget' and a 'flexible budget'.
State the main objective of preparing flexible budgets.

(05 marks)

iii. Following information is provided by the Kelani Traders

The direct labour hourly rate is expected to be Rs 500

100 per cent activity represent 80 000 direct labour hours.

Other element of costs:

Indirect labour	Rs. 20 per direct labour hour
Consumable Supplies	Rs. 400 per direct labour hour
Canteen and other welfare services	25% of direct and indirect labour costs

Semi – variable costs are expected to correlate with the direct labour hours in the same manner as for the last four years, given below:

Year	Direct labour hours	Semi – variable costs (Rs)
1	64 000	200 800
2	59 000	190 800
3	53 000	180 600
4	49 000	170 800

Fixed costs:

	Rs
Depreciation	180 000
Maintenance	100 000
Insurance	40 000
Management salaries	250 000

Required:

a. Prepare the flexible budget for 2017 January at the activity levels of 80 and 100 per cent.

(12 marks)

b. Calculate the budget cost allowance for 2017 assuming that 72 000 direct labour hours are worked.

(03 marks)

(Total 25 marks)

Question No. 04

i. The summarized income statement for Mahaweli Traders for the last year is as follows:

	Rs.' 000	**Rs.' 000**
Sales (5 000units)		1 000
Direct material	350	
Direct wages	200	
Fixed production overhead	200	
Variable production overhead	150	
Administration overhead	180	
Selling and distribution overhead	120	
		1 200
Profit		(200)

At a recent Board of Management meeting the Directors discussed the year's results. The Chairman has asked for your views to the followings suggestions with a view to improve the situation.

a. Pay salesmen a commission of 10 per cent on sales effective and thereby increase sales to achieve a 10 percent net profit margin

(05 marks)

b. Reduce selling price by 10 percent, which is estimated to increase sales volume by 30 percent.

(05 marks)

c. Increase the direct wage rate from Rs. 40 to Rs. 50 per hour, as part of a productivity /pay deal. It is expected that this will increase production and sales by 20 percent, if advertising cost is also increased by Rs. 50,000.

(05 marks)

d. Increase sales through an additional advertising expenditure of Rs. 300,000, and a revised selling price which maintaining a contribution/ sale ratio of 10 percent.

(05 marks)

Required:

Evaluate each proposals with calculations and to comment briefly on each separately.

ii. A company is considering whether to produce a component internally instead of buying from outside as it is the practice at present. A formal computation carried out in this regard favours producing the component internally.

State three (03) qualitative factors that you would consider before taking a final decision.

(05 marks)

(Total 25 marks)

Formula Sheet

The following variances are reported for both variable and absorption costing systems:

Materials and labour

1	Material price variance	=	(standard price per unit of material – actual price) × quantity of materials purchased
2	Material usage variance	=	(standard quantity of materials for actual production – actual quantity used) × standard price per unit
3	Total materials cost variance	=	(actual production × standard material cost per unit of production) – actual materials cost
4	Wage rate variance	=	(standard wage rate per hour – actual wage rate) × actual labour hours worked
5	Labour efficiency variance	=	(standard quantity of labour hours for actual production – actual labour hours) × standard wage rate
6	Total labour cost variance	=	(actual production × standard labour cost per unit of production) – actual labour cost

Fixed production overhead

7	Fixed overhead expenditure	=	budgeted fixed overheads – actual fixed overheads

Variable production overhead

8	Variable overhead expenditure variance	=	(budgeted variable overheads for actual input volume – actual variable overhead cost)
9	Variable overhead efficiency variance	=	(standard quantity of input hours for actual production – actual input hours) × variable overhead rate
10	Total variable overhead variance	=	(actual production × standard variable overhead rate per unit) – actual variable overhead cost

Sales margins

11	Sales margin price variance	=	(actual unit contribution margin* – standard unit contribution margin) × actual sales volume

(*Contribution margins are used with a variable standard costing system whereas profit margins are used with an absorption costing system. With both systems, actual margins are calculated by deducting *standard* costs from actual selling price.)

12	Sales margin volume variance	=	(actual sales volume – budgeted sales volume) × standard contribution margin
13	Total sales margin variance	=	total actual contribution – total budgeted contribution
14	Fixed overhead volume variance	=	(actual production – budgeted production) × standard fixed overhead rate
15	Volume efficiency variance	=	(standard quantity of input hours for actual production – actual input hours) × standard fixed overhead rate
16	Volume capacity variance	=	(actual hours of input – budgeted hours of input) × standard fixed overhead rate
17	Total fixed overhead variance	=	(actual production × standard fixed overhead rate per unit) – actual fixed overhead cost