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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

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

YEAR I SEMESTER II (INTAKE V – GROUP B)

END SEMESTER EXAMINATION – JULY 2016

AFM 10430 Intermediate Management Accounting

Date : 24th July 2016
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

i. a. Explain the difference between a direct cost and an indirect cost.

(02 Marks)

b. State three factors that influence on pricing decisions.

(03 Marks)

ii. Rathnapura Industries manufactures two products: Alpha and Beta. Both products are produced on the same assembly line and packaged with 10 units of product per pack. The predicted sales are 400,000 packs of Alpha and 500,000 packs of Beta. The budgeted costs for the coming year are as follows.

	Direct cost	**Indirect cost**
Material cost	Rs. 400,000	Rs. 800,000
Other cost	Rs. 600,000	Rs. 1,600,000

Each product uses 50% of the material costs. The other costs are allocated as follows: direct costs based on machine time (Alpha 200,000 hours and Beta 100,000 hours) and indirect costs are allocated evenly to both products. The management of Rathnapura Industries desires an annual profit of Rs. 200,000 per product.

Required:

a. Calculate the total cost for each product.
b. What price should be charged for each product?

(10 Marks)

iii. The Kandy Suppliers packages and distributes three grades of animal feed. The material cost per ton and estimated annual sales for each of the products are:

Product	**Material cost per ton**	**Estimated sales per year**
Super Premium	Rs. 1,600	1,000 tons
Premium	Rs. 1,200	1,500 tons
Economy	Rs. 1,000	2,500 tons

The indirect cost of operating the machinery, used to package all three products is Rs. 500,000 per year. In the past, prices have been set by allocating the indirect costs to products on the basis of estimated sales in tons. The resulting total costs (material costs plus allocated indirect costs) are then marked up by 50%.

Required:

a. Determine the price per ton for each grade of feed using the method described for setting prices.
b. Does the price in part (a) take into account how much customers are willing to pay for the product? Explain.

(10 Marks)

(Total 25 Marks)

Question No. 02

i. Why do finance managers find short payback period attractive?

(05 Marks)

ii. The directors of Galle Traders are now considering replacing its production equipment with new equipment that will be fully operational from January 1, 2017. The manufacturer of the new equipment has offered to accept the company's old equipment as a trade in at its net book value at 31 December 2016 of Rs. 4 million. If this offer is not accepted, Galle Traders does not expect disposed of the old equipment for any value at any time in future.

The new equipment:

- Has a cost of Rs. 12 million before any trade in value is deducted
- Increases the fixed production cost (excluding depreciation) by 10% per annum and the fixed production cost per year is Rs 4 million
- Reduces the variable production cost per unit by 20% and the current variable cost per unit is Rs 100.
- Has a life of five years, a residual value after five years of Rs. 2 million and is to be depreciated using straight line method.

Other information:

- Unit selling price is Rs. 250 and the demand for the product is 50,000 units for the first year which will increase by 10,000 units for each year thereafter.
- Cost of capital for this type of investment is 10% per annum.

Required:

a. Recommend, based on Net Present Value, whether or not Galle Traders should replace its existing equipment. Ignore taxation and inflation.

(15 Marks)

b. Discuss the effect on the break-even sales value in 2016 of investing in the new equipment. Your answer should be supported by appropriate calculations.

(05 Marks)

(Total 25 Marks)

Question No. 03

i. 'Standard costing and variance analysis is one of the main management accounting concepts which can be used to take decisions'. Do you agree with this statement? Explain?

(05 Marks)

ii. Following information is extracted from the budgeted and actual results for the previous period from the Matara Traders:

	Budget	**Actual**
Output (units)	1,500	1,600
Total labour cost (Rs.)	Rs. 300,000	Rs. 304,500
Labour hours	600	580

Required:

a. Labour rate variance
b. Labour efficiency variance
c. Assuming you are working as the Head of the Human Resource (HR) Department, explain in brief how would you use the above two variances for future HR development plans?

(10 Marks)

iii. The standard cost of Product X manufactured by Jaffna Engineers includes 3 kgs of direct materials at Rs. 5.00 per unit. During the month of June, 30,000kgs of direct materials were purchased at a cost of Rs. 4.70 per kg, and 27,600 units of direct materials were used to produce 9,000 units of Product X.

Required:

a. Material price variance.
b. Material usage variance
c. Based on the above two variances what actions are to be implemented for the future period to enhance the quality of materials management.

(10 Marks)

(Total 25 Marks)

Question No. 04

i. Explain the difference between planning and control in relation to cash budgets.

(05 Marks)

ii. A college is preparing its budget for the year 2017. In previous years the director of the college has prepared the college budget without the participation of the senior staff and presented it to the Board of Management of the College Board for approval.

Last year the College Board criticized the director over the lack of participation of his senior staff in the preparation of the budget and requested that, the senior staff should be involved in the preparation of the budget for the year 2017.

Required:

Discuss the potential advantages and disadvantages to involve the senior staff in the budget preparation process.

(05 Marks)

iii. Amal, manager of Kalutara Car Repair Centre, has provided the following information.

- Cash balance at the end of September is Rs. 50,000.
- Actual and Projected revenues for last 4 months are as follows.

	September Actual	**October Projected**	**November Projected**	**December Projected**
Cash sales (Rs.)	Rs.240,000	350,000	380,000	480,000
Sales on credit (Rs.)	380,000	400,000	420,000	450,000

- Credit sales 60% being collected in the month of the sale, balance in the next month.
- Projected expenditure during this period is as follows:
  - 5% of Selling expense from total sales is paid after one month
  - Administrative expenses are budgeted to be Rs. 60,000 each month.
  - A new equipment will be purchased for Rs. 500,000 in the month of October. Down payment Rs 200,000 is to be paid in October and the balance to be paid in equal installments within the next two months.
  - Amal wants to maintain a minimum cash balance of Rs. 200,000.

Required:

a. Prepare a schedule showing receipts from customers for the credit sales.

b. Prepare a cash budget for the month ofOctober and December.

c. Prepare projected income statement for the 3months ending on December 31.

(15 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	=	(actual sales volume – budgeted sales volume) ×
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