THE INSTITUTE OF
CHARTERED ACCOUNTANTS OF SRI LANKA

No. of Pages - 15
No of Questions -07

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

YEAR I SEMESTER II (Group A)
END SEMESTER EXAMINATION – DECEMBER 2014

AFM 10430 Intermediate Management Accounting

Date	:	17th December 2014
Time	:	1.00 p.m. – 4.00 p.m.
Duration	:	Three (03) Hours

Instructions to Candidates:

- This paper consists of three sections (A, B and C).
- Section A – Answer **ALL** questions in the separate sheet provided

  Section B – Answer **three** out of four questions given

  Section B – Answer **one** out of two questions given
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Use of calculator is allowed.
- Present Value Sheet is provided.
- Answers should be written neatly and legibly.

Section A

Answer **ALL** questions.

1. Cash flows determined for the purpose of project appraisal consist of:
   i. Externalities, cash outlays and opportunity costs
   ii. Externalities, earnings and opportunity costs
   iii. Profits, opportunity costs and cash outlays
   iv. Cash outlays, earnings and externalities
   v. Sunk costs, opportunity costs and earnings.

2. Out of the following what are the limitations of the economist's pricing model:
   a. Demand is usually computed at aggregate level, for the industry
   b. Inability to identify product-wise capacity costs
   c. Applicable to single product situations only
   d. Profit maximization is not ardently followed by every organization
   e. Concept not applicable to all market structures.
   i. a and b only
   ii. a, b and c only
   iii. c and d only
   iv. a, b, c and d only
   v. e only.

3. Which of the following is not considered a pricing method:
   i. Target cost based pricing
   ii. Target ROI based pricing
   iii. Target predatory pricing
   iv. Full cost based pricing
   v. Variable cost based pricing.

4. Which of the following is not true in respect of standard cost:
   i. A pre-determined measurable quantity set in pre-specified conditions
   ii. A standard expressed in money
   iii. Determined as assessment of the value of cost estimates
   iv. Provides a basis for performance measurement and control
   v. Usually valid for a period of six months after which revisions have to be made.

Questions No. 5, 6 and 7 are based on the following information:

The Nawala Tiles Ltd. produces wall tiles of size 4”x4”x1/4” using two types of raw material A and B. The following standard costs have been set for 10,000 units of wall tiles.

Type of material	**Quantity (kg) per tile**	**Price (Rs) per kg.**
A	2	10
B	1	15

During the month of October 2014 the company produced 9,000 wall tiles. Actual material used and its costs are as follows:

Type of material	**Total quantity (kg)**	**Total cost (Rs.)**
A	19,000	209,000
B	10,100	141,400

5. The material price variance will be:
   i. Rs. 8,900 (F)
   ii. Rs. 8,900 (A)
   iii. Rs. 9,800 (F)
   iv. Rs. 9,800 (A)
   v. None of the above.

6. The material usage variance will be:
    i. Rs. 25,600 (F)
    ii. Rs. 25,600 (A)
    iii. Rs. 26,500 (F)
    iv. Rs. 26,500 (A)
    v. None of the above.

7. The total direct material cost variance will be:
    i. Rs. 16,700 (A)
    ii. Rs. 36,300 (A)
    iii. Rs. 35,400 (A)
    iv. Rs. 17,600 (F)
    v. None of the above.

8. Which of the following is not a *cost estimating* method?
    i. Engineering methods
    ii. Inspection of the accounts method
    iii. Graphical or scatter graph method
    iv. Cash flow method
    v. High-low method.

9. Out of the following, examples of *feed-back control* would be:
    a. Preparation of standard costs
    b. Estimation of the cost function
    c. Comparing the actual results with the budgeted
    i. a only
    ii. b only
    iii. c only
    iv. a and b only
    v. b and c only.

10. A plantation coming within a Sri Lankan plantation company would be:

i. A standard cost centre
ii. A discretionary cost centre
iii. A revenue centre
iv. A profit centre
v. An investment centre

(Total 20 Marks)

Section B

Answer **three** out of four questions given.

Question No. 01

The Portsmouth Pottery Company (PPC) manufactures a line of pottery that is primarily related to the souvenir and tourist industries.

Frank Galappththi, the production manager is considering the possibility of purchasing a new kiln for Number 5 line. This line produces commemorative plaques. The kiln costs Rs. 7,000,000 and has a life of five years. PPC has a marginal tax rate of 35%. The tax depreciation schedule allows the following percentages of the cost of the kiln to be claimed during the kiln's life: Year 1, 16%; year 2, 21%; year 3, 21%; year 4, 21% and year 5, 21%. The new kiln would be used to replace an existing kiln, which has a useful life of five years. The existing kiln has been fully depreciated and has a salvage value of Rs. 250,000.

The new kiln promises annual cost savings of Rs. 1,000,000 in the production of the existing plaques. In addition, the size and operating attributes of the new kiln will allow PPC to begin producing a new line of mugs that could be printed with the customer's promotional message. The net income before taxes expected from the new line of business is Rs. 1,200,000 per year. The scrap value of the new kiln would be Rs. 500,000 in five years. PPC is required to take any scrap value, in excess of the un-depreciated historical cost of an asset, into income to be taxed at at the normal rate. PPC's required after-tax return on this type of investment is 14%.

Required:

a. Prepare an after tax net cash flow statement.

(08 Marks)

b. Based on the NPV method should the kiln be purchased?

(04 Marks)

c. Compute the IRR for the project. What does it indicate

(06 Marks)

d. State two other factors that you may take before taking the final decision to invest in the kiln.

(02 Marks)

(Total 20 Marks)

Question No. 02

i. H De Livera is the owner of a 60 room hotel. He anticipates that he will rent these rooms for 16,000 nights next year (or 16,000 room nights). All rooms are similar and will rent for the same price. De Livera estimates the following operating costs for next year:

Variable operating costs Rs. 3,000 per room night.

Fixed costs:

Cost Item	**Rs.**
Salaries and wages	17,500,000
Maintenance of building and pool	3,700,000
Other operating and admin. costs	14,000,000
Total fixed costs	35,200,000

The capital invested in the hotel is Rs. 96,000,000. The owner's target return on investment is 25%. De Livera expects the demand for rooms to be uniform throughout the year. He plans to price the room at cost plus mark-up to earn the target return on investment.

Required:

a. Price to be charged for a room night

(05 Marks)

b. The mark-up over the full-cost of a room night.

(03 Marks)

ii. In the Company XYZ Group, Components Division produces a part that is used by the Goods Division. The cost of manufacturing the part is as follows:

	Rs.
Direct materials	100
Direct labor	20
Variable overhead	30
Fixed overhead*	50
Total cost	200

*Based on a practical volume of 200,000 parts.

Other costs incurred by the Components Division are as follows:

Fixed selling and administrative costs Rs. 5,000,000

Variable selling cost Rs. 10 per unit

The part is usually sold between Rs. 280 and Rs.300 in the external market. Currently, the Components Division is selling it to the external customers for Rs.290. The division is capable of producing 200,000 units of the part per year; however, because of the weak economy prevailing in the country, only 150,000 parts are expected to be sold during the coming year. The variable selling expenses are avoidable if the part is sold internally. The Goods Division has been buying the same part from an external supplier for Rs.280.

Required:

a. Assuming that the Goods Division expects to use 50,000 units of the part during the coming year, what is the minimum transfer price that the Components Division should accept?

(03 Marks)

b. Assuming that the Components Division is able to sell 200,000 units of the part in the external market, what should be the transfer price that the Component Division should decide upon?

(03 Marks)

c. Assuming that the Goods Division expects to use 70,000 units of the part during the coming year. The manager of the Components Division suggests that 50,000 units of the part should be transferred internally and that the balance 20,000 units should be purchased in the external market by the Goods Division. Discuss the feasibility of the suggestion.

(06 Marks)

(Total 20 Marks)

Question No. 03

The following information is provided by the Management Accountant of Good Luck Ltd.

Item I: Recent performance and budgeted figures are as follows:

	Actual (Rs.'000s)		**Budgeted (Rs. '000s)**			
	July	**Aug**	**Sept.**	**Oct.**	**Nov.**	**Dec.**
Sales	700	600	700	900	1,000	1,000
Purchases	350	300	350	450	500	600
Admin. Expenses	80	100	80	120	100	150

Item II. Terms and conditions for sales, purchases and administrative expenses:

Sales: From the total sales 60% are on credit basis and the balance 40% are on cash basis. Invoices are issued at the end of each month. Throughout the period the company maintains a gross profit of 40% on the sales value. Collections from the credit sales are as follows:

50% collected during the first month after issuing the invoice

40% collected during the second month after issuing the invoice

Balance 10% not collectable. i.e. consider as bad debts.

Purchases: All purchases are made on credit basis. They are settled during the month after the purchase.

Administrative expenses are settled during the same month as expenditure is incurred. They include Rs. 10,000 of depreciation of fixed assets.

Item III: Selling and distribution expenses are calculated on Rs. 20,000 plus10% on the related month's total value of sales. They have to be settled the following month.

Item IV: The Company has to renew the lease for the office building in September 2014 for another year. Based on the new lease agreement the monthly rental will be Rs. 25,000. Rentals for six months have to be paid on the signing date in September and the balance Rs. 150,000 will be paid each month starting in October @ Rs. 15,000 per month. This is not included in the administrative expenses above.

Item V: In order to enhance the business activities in the future, the company intends to introduce a new quality improvement programme in December, costing Rs. 500,000. From this total cost 60% will be generated by issuing 20,000 ordinary shares @ Rs. 10 each at a premium of 50% issued in September.

Item VI: Cash balance on September 1, Rs. 20,000. As a policy the company maintains at least Rs. 10,000 as cash balance at the end of each month. The company has a permanent overdraft facility with their bank against property mortgaged. Ignore interest.

Required:

a. Cash budget for the months of September, October and November 2014.

(12 Marks)

b. Budgeted income statement for the three months ending November 30, 2014.

(04 Marks)

c. Distinguish between *Incremental budgeting* and *Zero-based budgeting*.

(04 Marks)

(Total 20 Marks)

Question No. 04

a. Fill in the blanks (1-10) in Table 1 given below by calculating the 'Activity Cost Driver Rate' for the activity costs of Company X.

Table 1: Activity Cost Driver Rates

Activity	Activity Cost Driver	Activity Cost Driver Volume	Activity Cost Driver Rate (Rs.)
Customer-order processing Rs. 108,000/=	No. of customer orders	1080 orders	1.
Materials purchasing Rs. 86,000/=	No. of invoices	430 invoices	2.
Production scheduling Rs. 140,000/=	No. of production runs	280 runs	3.
Materials movements Rs. 118,000/=	No. of movements	1180 movements	4.
Machine setting up Rs. 59,000/=	No. of setups	590 setups	5.
Inspecting for quality control Rs. 81,000/=	No. of inspections	810 inspections	6.
Production information processing Rs. 49,000/=	No. of production runs	280 runs	7.

Performing engineering changes Rs. 93,000/=	No. of changes	93 changes	8.
Responding to customers Rs. 71,000/=	No. of contacts	3550 contacts	9.
Attending to quality matters RS. 45,000/=	No. of cases	450 cases	10.

(05 Marks)

b. Based on the 'Activity Cost Driver Rates' calculated in 'a', fill in the blanks (1-12) in the table given below by calculating the 'Activity-based Cost of Customers; A and B' the 'Total Activity Cost of Customers; A and B' and the 'Unit Cost for Customers; A and B' of Company X.

Table 2: Activity-based Costing of Customers

Activity	Customer A	AB Cost Customer A	Customer B	AB Cost Customer B
Customer-order processing	1 order for 850 units	1.	1 order for 500 units	1.
Materials purchasing	3 invoices	2.	5 invoices	2.
Production scheduling	4 runs	3	7 runs	3
Materials movements	5 movements	4.	8 movements	4.
Machine setting up	4 setups	5	8 setups	5
Inspecting for quality control	2 inspections	6.	5 inspections	6.
Production infor. processing	4 runs	7.	7 runs	7.
Performing engineering changes	4 changes	8.	8 changes	8.
Responding to customers	2 contacts	9.	6 contacts	9.

Attending to quality matters	3 cases	10.	6 cases	10.
Total Activity Cost of Customer		11.		11.
Unit Cost		12.		12.

(06 Marks)

c. A Company, which manufactures ceramic products, employs people who are experienced in the ceramic industry but who are not computer literate. This is a family owned business where the owners are managers and consider that all employees should engage in the production process. In this Company, a pre-costing was carried out for each order before it was accepted, based on the forecasted information, to decide on the price to be quoted for an order. For the pre-costing the relevant information was obtained from the different production related functional areas. After the order was completed a post-costing was carried out. In this business organization, all orders completed during a month reflected a profit in the post-costing exercise.

However, a loss was reflected when a profit and loss account was prepared for the month. There seemed to be a disparity between the post-costing prepared for each completed order during the month and the profit and loss account for the month. In the post-costing, the direct labour cost had been calculated by multiplying the average direct labour hours used for the order by a standard rate per labour hour, instead of the actual direct labour hours and actual rate per labour hour. From the direct labour cost calculated, 65% was arbitrarily apportioned as factory overhead costs, and 30% of the direct labour cost was arbitrarily apportioned as other overhead costs.

However, the monthly profit and loss account provided accurate results, as it was prepared using the actual financial information obtained from the trial balance prepared for the month. This Company has been receiving mass orders in its early years. However, in the recent years the Company has been receiving complex but small order quantities, which require a range of activities to be performed. The Company was not able to price its orders at a competitive price.

A group of Sri Lankan consultants who are professional accountants had been appointed to resolve the costing issues that prevailed within the Company. They recommended that the Company should adopt the Activity Based Costing (ABC) technique.

Required:

a. Discuss the constraints in implementing activity based costing in this Company

(03 Marks)

b. State why Activity Based Costing (ABC) should be implemented in this Company.

(03Marks)

c. If this Company has decided to adhere to the recommendations made by the consultants, list the steps to be taken when implementing activity based costing in this Company.

(03 Marks)

(Total 20 Marks)

Section C

Answer **one** out of two questions given

Question No. 05

Answer the following questions (long answers are not expected).

a. State and explain the pre-condition to preparing a purposeful budget for an organization?

(03 Marks)

b. Identify the steps associated with preparing the annual budget for a medium sized manufacturing organization.

(05 Marks)

c. State the guiding principle of responsibility accounting.

(02 Marks)

d. Compare and contrast Functional vs. Divisional organizational structures.

(05 Marks)

e. Clearly distinguish among behavioral, cultural and output controls as practiced in organizations?

(05 Marks)

(Total 20 Marks)

Question No. 06

Accounting professionals in business organizations use the following concepts and techniques in the strategy making process. Describe each of these concepts and techniques laying emphasis on practical use in organizations for planning, control and decision making purposes.

i. Balanced Score Card (BSC) Technique

(05 Marks)

ii. SWOT Analysis Technique

(05 Marks)

iii. Triple Bottom-line Concept

(05 Marks)

iv. Porter's Five Forces Analysis Technique

(05 Marks)

(Total 20 Marks)