THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

No. of Pages - 10

No. of Questions - 08

SCHOOL OF ACCOUNTING AND BUSINESS
BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE PROGRAMME 2013/14

YEAR I SEMESTER II
END SEMESTER EXAMINATION – MAY 2014

AFM 10430 Intermediate Management Accounting

Date	:	16th May 2014
Time	:	9.00 a.m. – 12.00 p.m.
Duration	:	Three (03) hours

Instructions to Candidates:

- Answer ALL the questions.
- This paper consists of three sections (A, B and C).
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Use of scientific calculator is allowed.
- Answers should be written neatly and legibly.

SECTION A

Answer all the questions

Mark the correct answer for each question in the separate sheet provided.

1) Where the budgeted fixed overhead is less than the actual fixed overhead it is:
   i. Unfavourable variance
   ii. Favourable variance
   iii. Normal variance
   iv. Budgeted variance

2) Which of the following budgets will typically be prepared first in the budget preparation cycle of a manufacturing company:
   i. Production budget
   ii. Sales budget
   iii. Material purchase budget
   iv. Labour budget

3) Fixed cost per unit decreases when:
   i. Production volume increases.
   ii. Production volume decreases.
   iii. Variable cost per unit decreases.
   iv. Variable cost per unit increases.

4) Which of the following is not true in relation to a cash budget?
   i. A cash budget sets out all cash receipts and payments that a business expects to make over a period of time.
   ii. Cash budgets are usually prepared on a month-to month basis.
   iii. Cash budgets show the expected bank balance at the end of the month.
   iv. Cash budgets include personal cash receipts and expenses of the owner of the company.

5) The accounting rate of return is measured as follows:

i. Average annual profit expressed as a percentage of the total funds invested in the project.
ii. Average annual profit expressed as a percentage of the average funds invested in the project.
iii. Total profits expressed as a percentage of the average funds invested in the project.
iv. Total profits expressed as a percentage of the total funds invested in the project

6) Which of the following statements concerning the payback period is not true?

i. The payback period is simple to calculate and understand.
ii. The payback period measures the time that a project will take to generate enough cash flows to cover the initial investment.
iii. The payback period ignores cash flows after the payback point has been reached.
iv. It takes account of the time value of money.

7) Which is the mostly likely purpose of budgeting?

i. Planning and control of an organization's income and expenditure.
ii. Preparation of a five-year business plan.
iii. Company valuation.
iv. Assessing the non-financial performance of an organization.

8) Which of the following statements concerning NPV is not true?

i. The NPV technique takes account of the time value of money.
ii. The NPV of a project is the sum of all the discounted cash flows associated with a project.
iii. The NPV technique takes account of all the cash flows associated with a project.
iv. If two competing projects are being considered, the one expected to yield the lowest NPV should be selected.

9) If there is a favourable materials price variance then this could be due to:

i. More wastage of materials incurred.
ii. Exchange rate depreciation if materials are imported.
iii. Inferior quality materials being used.
iv. Higher wage costs.

10) A favourable total sales variance could have been the result of:

i. A fall in sales volume and a price reduction.

ii. Lower output leading to favourable total cost variances.

iii. A price cut leading to a proportionality higher increase in sales volume.

iv. A price cut leading to a proportionality lower increase in sales volume.

(Total 10 Marks)

SECTION B

Answer all the questions

Question No. 01

EXCEL Ltd. is a manufacturing company incorporated in the United States. EXCEL Ltd. has located its main factory in Colombo and produces a product known as magma. The product requires a single operation, and the standard cost for this operation is presented in the following standard cost card:

Standard cost card for the product magma	($)
Direct materials:	
2 kg of A at $ 10 per kg	20
1 kg of B at $ 15 per kg	15
Direct labour (3 hours at $ 9 per hour)	27
Variable overhead (3 hours at $ 2 per direct labour hour)	6
Total standard variable cost	68
Standard contribution margin	20
Standard selling price	88

EXCEL Ltd plans to produce 10,000 units of the product in the month of April, and the budgeted costs based on the information contained in the standard cost card are as follows:

Budget based on the above standard costs and an output of 10,000 units	($)
Sales (10,000 units at $ 88)	880,000
Direct materials:	
A: 20,000 kg at $ 10 per kg	200,000
B: 10,000 kg at $ 15 per kg	150,000
350,000	
Direct labour (30,000 hours at $ 9 per hour)	270,000
Variable overheads (30,000 hours at $ 2 per direct labour hour)	60,000
680,000	
Budgeted contribution	200,000
Fixed overheads	120,000
Budgeted profit	80,000
The actual results for April are:	
Sales (9,000 units at $ 90)	810,000
Direct materials:	
A: 19,000 kg at $ 11 per kg	209,000
B: 10,100 kg at $ 14 per kg	141,400
Direct labour (28,500 hours at $ 9.60 per direct labour hour)	273,600
Variable overheads	52,000
Contribution	134,000
Fixed overheads	116,000
Profit	**18,000**

Actual production and sales for the period were 9,000 units.

a. You are required to calculate following variances:

i. Material price
ii. Material usage
iii. Labour rate
iv. Labour efficiency
v. Variable overhead expenditure
vi. Variable overhead efficiency

vii. Fixed overhead expenditure
viii. Sales margin price
ix. Sales margin volume
x. Total sales margin.

(10 marks)

b. Reconcile budgeted profit with actual profit for the month of April.

(05 marks)
(Total 15 marks)

Question No. 02

Ruwan owns a successful catering company which he started 10 years ago. Lakeview College is a college that conducts adult education classes every evening for the local community. The principal of the college approached Ruwan to see if he would be interested in using the college premises and to provide evening meals for the students. Ruwan will not have to pay rent for the premises.

The following information is available in respect of the new project:

• The initial cost of the investment for the necessary cooking equipment is Rs.6, 000,000. This amount will be paid at the beginning of the contract-period and is expected to have zero value after the end of the five-year contract period.

• Average selling price of meals: Rs.60 per meal for the first three years, then Rs.80 for the next two years. Cost of meals: Rs.14 per meal for the first three years, then Rs.17 for the next two years. Labour costs will be Rs.240, 000 per annum.

• It is forecast that sales (meals) will be as follows:

Year	No of meals
1	200,000
2	210,000
3	220,000
4	230,000
5	240,000

• The company uses straight-line depreciation.

• The cost of capital is 10%.

Required to:

Calculate the Internal Rate of Return (IRR) , Discounted Payback period and the Accounting Rate of Return (ARR) of the project and advise Ruwan whether he should accept the project or not.

(Total 15 marks)

Question No. 03

The following are the estimates for the nine months ending 30th September 2014 of SENSAL PLC. engaged in the manufacture of a single product.

Budgeted Sales in units

Month	Units	Month	Units
January	20,000	June	24,000
February	22,000	July	28,000
March	24,000	August	22,000
April	26,000	September	20,000
May	28,000		

The selling price per unit is Rs.300/- .

50% of the monthly sales will be for cash and the balance on credit. Receivables will be collected as follows:

- 50% of the credit sales value in the month of sales.
- 30% of the credit sales value in the month following the month of sales.
- 20% of the credit sales value in the second month following the month of sales.

Costs:

Direct costs:

	Per unit (Rs.)
Materials (3 units x Rs.50/-)	150
Labour	50
Expenses	50
	250

Indirect costs

Per month (Rs.)

Manufacturing overheads	120,000
Administrative overheads	240,000

Selling and Distribution overheads are 15% of gross sales of the respective month.

Annual depreciation charge for the factory machinery and office equipment are Rs.60, 000/- and Rs.36, 000/- respectively and are included in the above overheads cost.

Stocks:

-The finished goods stock at the end of each month is to be maintained at 20% of the budgeted sales for the following month.

-A stock of raw material at the end of each month equal to the production requirement for the following month is to be maintained.

Other information:

-Payments for raw material purchases are to be made in the month following the month of purchases.

-All other direct costs and overheads are paid during the month in which they are incurred.

From the above information, you are required to prepare the following for the 3 months ending 30 September 2014:

I. Sales budget
II. Production budget (in units)
III. Material purchase budget
IV. Material usage budget
V. Labour budget

(Total 15 marks)

Question No. 04

(I) DILKA PLC has recently raised Rs.1, 000,000 through a debenture issue, and the directors are considering ways of using these funds. Three projects (A, B and C) are being considered, each involving the immediate purchase of equipment costing Rs.1, 000,000. One project only can be undertaken, and the equipment for each project will have a useful life equal to that of the project, with no scrap value. Kamal is a young executive who has recently been appointed to the position of Financial Manager of DILKAPLC.

Kamal has prepared a report to the Chairman regarding these projects and in his report he recommends project C because it shows the highest internal rate of return according to his computations. The following summary is taken from his report:

Project	Net cash flows (Rs.000) Years							
	0	1	2	3	4	5	6	7
A	(1,000)	250	250	250	250	250	-	-
B	(1,000)	100	200	300	400	500	600	-
C	(1,000)	500	300	100	100	100	100	100

The Chairman of the company is accustomed to projects being appraised in terms of payback and accounting rate of return, and he is consequently suspicious of the use of internal rate of return as a method of project selection. Accordingly, the Chairman has asked for an independent report on the choice of project. The company's cost of capital is 10% and a policy of straight-line depreciation is used to write off the cost of equipment in the financial statements.

Requirements:

a. Calculate the payback period for each project.

(06marks)

b. Calculate the Net Present Value (NPV) for each project.

(06 marks)

c. Advise the company on the selection of the above projects.

(03marks)

(Total 15 marks)

Question No. 05

The directors of Ceeta Enterprises decided to set up a 'Meet and Greet' airport parking facility. They identified a suitable land within a ten-minute drive of the airport which is available on a five year lease at a cost of Rs.6,000,000 per annum, payable quarterly in advance from 1st April.

Other start-up costs payable in Month 1 of trading are provision of perimeter fencing and installation of a secure access system which will total Rs.2, 000,000, along with a computer and office fittings at Rs.250, 000. Rather than initially investing in the building of an office block, the directors decided to rent a portable cabin which will have multiple uses as an office, a security facility and a rest room for drivers.

A deposit of Rs.600, 000 is required on 1st April for the cabin. This is repayable if the cabin is returned in good condition at the end of a four-year rental period. Ongoing monthly rental charges for the cabin are Rs.35, 000, to be settled in the month in which they are incurred. A CCTV system will cost Rs.550, 000 to install, payable in Month 1 and Rs.10, 000 per month for the 24-hour service and maintenance contract payable on 30 day credit terms.
All other monthly overheads including electricity, telephone and insurance are Rs.70, 000 payable by direct debit.

The company will employ one full-time administrator at a cost of Rs.1, 800,000 per annum, payable monthly. The 12 drivers are required to work a three-shift system and will be contracted from an agency at a cost of Rs. 600,000 per month payable in 30 days. Bookings are made via the internet and customers are required to pay in full at the time of booking. Advance sales for the first 6 months total Rs.80, 000,000 and this money is in the bank account at the start of trading. Bookings made in the next 6 months are predicted as follows:

Month	Rs.
April	15,000,000
May	18,000,000
June	20,000,000
July	22,000,000
August	24,000,000
September	26,000,000

Prepare a cash budget for the company for the six months to 30th September.

(Total 15 Marks)

SECTION C

Answer all the questions

Question No. 01

Why does Management Accounting play a vital role in a business organization?

(Total 5 Marks)

Question No. 02

(I) Briefly explain the characteristics of the following cost management techniques:

a) Just in Time

b) Kaizen costing

c) Target costing

(06 marks)

(II) "Managing cost will be useful for an organization to achieve competitive advantage." Comment.

(04 marks)
(Total 10 Marks)

Present Value Table

Period	5%	10%	12%	14%	15%	16%	18%	20%
1	0.952	0.909	0.892	0.877	0.869	0.862	0.847	0.833
2	0.907	0.826	0.797	0.769	0.756	0.743	0.718	0.694
3	0.863	0.751	0.711	0.675	0.657	0.640	0.608	0.578
4	0.822	0.683	0.635	0.592	0.571	0.552	0.516	0.482
5	0.783	0.620	0.567	0.519	0.497	0.476	0.437	0.401
6	0.746	0.564	0.506	0.455	0.432	0.410	0.370	0.334
7	0.710	0.513	0.452	0.399	0.375	0.353	0.314	0.279