No. of Pages - 14
No of Questions - 08

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

YEAR I SEMESTER II (Group B)
END SEMESTER EXAMINATION – JULY 2015

AFM 10430 Intermediate Management Accounting

Date : 4th July 2015
Time : 9.00 a.m. – 12.00 p.m.
Duration : Three (03) hours

Instructions to Candidates:

- This paper consists of three sections (I, II and III).
- Section I – Answer **ALL** questions in the separate sheet provided
  Section II – Answer any **three** out of four questions given
  Section III – Answer **ALL** questions
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Use of calculator is allowed.
- Discounted table is provided.
- Answers should be written neatly and legibly.

Section I

1. XYZ Group has three divisions. Information for the year ending 30th September is as follows;

	Division A Rs. '000	Division B Rs. '000	Division C Rs. '000	Total Rs. '000
Sales	350	420	150	920
Variable Costs	(280)	(210)	(120)	(610)
Contribution	70	210	30	310
Fixed Overhead Costs				262.5
Net Profit				47.5

General fixed overhead costs included in Fixed Overhead Costs are allocated to each division on the basis of sales revenue; 60 percent of the total fixed costs incurred by the Company are specific to each division and is split equally among the three divisions.

Which division / divisions should remain open if the XYZ Group wishes to maximize profits?

a. A, B and C
b. A and B only
c. B only
d. B and C only
e. A and C only

2. J Ltd. manufactures three products: W, X and Y. The products use a series of different machines but there is a common machine that has created bottleneck. The standard selling price and standard cost per unit for each product for the forthcoming period are as follows;

	W **Rs.**	**X** **Rs.**	**Y** **Rs.**
Selling Price	200	150	150
Cost			
Direct Material	41	20	30
Labour	30	20	36
Overhead Costs	60	40	50
Profit	69	70	34
Bottleneck Machine Minutes per Unit	9	10	7

40% of the overhead cost is variable.

What would the best ranking of the products be for best use of the bottleneck?

a. W Y X

b. X Y W

c. Y W X

d. X W Y

e. Y X W

3. Which of the following techniques can a business use to ensure that its manufacturing operation systems and technologies are better than those of the competitors?

a. Customer Profitability Analysis

b. Activity Based Costing

c. Life Cycle Costing

d. Benchmarking

e. SWOT Analysis

Information required for questions 4 and 5 is as follows;

The following data is given relating to two investment projects, of which only one is to be selected.

	Project A Rs.	**Project B** Rs.
Initial Capital Expenditure	50,000	50,000
Profit / Loss for the Year 1	25,000	10,000
2	20,000	10,000
3	15,000	14,000
4	10,000	26,000
Estimated Resale Value at the End of Year 4	10,000	10,000

Note: Profit has been calculated after depreciation on the straight line method.

The Cost of Capital is 10%.

4. What is the Payback Period of Projects A and B?

	Project A Years	**Project B** Years
a.	2.4	1.5
b.	1.5	2.4
c.	1.5	2
d.	1	2
e.	1.5	3

5. What is the Net Present Value (NPV) of Projects A and B?

	Project A **Rs.**	**Project B** **Rs.**
a.	95,860	84,142
b.	45,860	34,142
c.	95,860	34,142
d.	45,860	84,142
e.	50,000	34,142

Information required for questions 6 and 7 is as follows;

Q PLC uses Standard Costing to determine the labour variances relevant to the rate and efficiency. The details for the month of April were as follows;

Budgeted output	15,000 units
Budgeted labour hours	60,000 hours
Budgeted labour cost	Rs. 540,000
Actual output	14,650 units
Actual labour hours paid	61,500 hours
Actual labour cost	Rs. 522,750

6. What is the labour rate variance?
   a. Rs. 30,750 Adverse
   b. Rs. 30,750 Favourable
   c. Rs. 17,250 Adverse
   d. Rs. 17,250 Favourable
   e. None of the above

7. What is the labour efficiency variance?
    a. Rs. 26,100 Adverse
    b. Rs. 26,100 Favourable
    c. Rs. 13,500 Adverse
    d. Rs. 13,500 Favourable
    e. Rs. 24,650 Adverse

8. When evaluating capital investment projects, what is/ are the technique/ techniques that consider that reinvestments could be made at the cost of capital rate?
    a. IRR and NPV
    b. NPV only
    c. IRR only
    d. ARR and IRR
    e. ARR only

9. Which of the following could be used to evaluate the performance of an 'Investment Centre'?
    a. ROCE and RI
    b. Net Profit Margin and Gross Profit Margin
    c. Standard Cost Variance Analysis
    d. ROCE
    e. RI

10. Which of the following, contains an integrated focus?
    a. Cost Accounting
    b. Management Accounting
    c. Strategic Management Accounting
    d. Sustainability Management Accounting
    e. None of the above

(Total 20 Marks)

Section II

Answer **any Three (03)** Questions

Question No. 01

The Managing Director (MD) of an organisation is a young industrial engineer, who picked up ideas of the Balanced Scorecard (BSC) during his university days in the United States. The MD thought that the BSC will systemise the family business which was located in a Less Developed Country (LDC), Sri Lanka. The business had been run on an ad-hoc basis. A professional accountant was recruited and the services of a foreign consultant was obtained to implement the intended project. However, the BSC ended up as a mere information-processing function rather than a management control system.

a. What is the principle underlying the Balanced Scorecard, as a technique for performance measurement within a business?

(5 Marks)

b. What are the factors that should be considered when a decision is made to implement a particular management accounting technique such as BSC within a business? Discuss.

(10 Marks)

(Total 15 Marks)

Question No. 02

Explain how accounting professionals involved in the strategy making process will use the following techniques;

a. SWOT Analysis

(5 Marks)

b. Benchmarking

(5 Marks)

c. Porter's Generic Strategies

(5 Marks)

(Total 15 Marks)

Question No. 03

ABBA is evaluating the introduction of a new product, which would involve the use of a new machine, costing Rs. 3,000,000. After carrying out a market research, the company identified that, the demand for the new product will last for five years. The annual demand will be 5,000 units per annum in the first two years at a unit selling price of Rs. 640 and 6,000 units per annum for the next three years at a unit selling price of Rs. 600.

Having analysed the prototype of the product the engineering department has estimated that the direct material is Rs. 140 per unit and a conversion cost Rs. 200 per unit. This includes a depreciation charge of Rs. 40 per unit. The new product will incur an additional fixed overhead cost of Rs. 500,000 per annum.

After the five year life of the project, the machine would have a disposal value of Rs. 1,100,000. A working capital of Rs. 200,000 is required at the commencement of the product.

Given if the company's cost of capital is 15%, evaluate the project based on the Net Present Value (NPV). Should the project be accepted for implementation?

(Total 15 Marks)

Question No. 04

Lake of Egypt Marina, Inc. Balance Sheet as of December 31, 2013 and 2014 (in millions of dollars)					
Assets	**2013 ($)**	**2014 ($)**	**Liabilities & Equity**	**2013 ($)**	**2014 ($)**
Current assets:			Current liabilities:		
Cash and marketable securities	65	75	Accrued wages and taxes	43	40
Accounts receivable	110	115	Accounts payable	80	90
Inventory	190	200	Accrued payments	70	80
Total	365	390	Total	193	210
Fixed assets:			Long-term debt:	280	300
Gross plant and equipment	471	580	Stockholders' equity:		
Less: Depreciation	100	110	Preferred stock (5 million shares)	5	5
Net plant and equipment	371	470	Common stock	65	65
Other long-term assets	49	50	Retained earnings	242	330
Total	420	520	Total	312	400
Total assets	785	910	Total liabilities and equity	785	910

Lake of Egypt Marina, Inc. Income Statement for Years Ending December 31, 2013 and 2014 (in millions of dollars)				
	2013 ($)		**2014 ($)**	
Net sales (all credit)	432		515	
Less: Cost of goods sold	200		260	
Gross profits		232		255
Less: Depreciation	20		22	
Earnings before interest and taxes (EBIT)		212		233
Less: Interest	30		33	
Earnings before taxes (EBT)		182		200
Less: Taxes	55		57	
Net income		127		143
Less: Preferred stock dividends		5		5
Net income available to common stockholders		122		138
Less: Common stock dividends		65		65
Addition to retained earnings		57		73

a. Calculate the Return on Capital Employed (ROCE) of this foreign Company for 2014 based on the return available to the common stockholder and the investment made on total assets.

(5 Marks)

b. Discuss methods as to how the ROCE could be increased in 2015.

(10 Marks)

(Total 15 Marks)

Question No. 05

a. In cost-plus markup pricing method, is 'fixed cost' a relevant cost, when there is surplus capacity? Explain

(5 Marks)

b. 'Oshin' is a Japanese restaurant, which serves medium price food to Sri Lankan customers. Its strategy is to provide quality food at reasonable prices. Hence, its variable costs are high owing to the use of high quality ingredients. Selling price is fixed to cater to the mass market. As such, its contribution margin is low. Thus, in order to cover its fixed costs and make a profit, it has to depend on high volume production. Discuss the strategy that could be followed by 'Oshin' to be a profitable venture.

(10 Marks)

(Total 15 Marks)

Question No. 06

A company prepares its operational budgets every four months on a monthly basis. The following information has been gathered for this purpose for 2015.

i. Sales income has been estimated on an incremental basis in the following manner

	July	**August**	**September**	**October**
Sales in units	22,000	31,000	29,000	34,000
Price per unit (Rs.)	6	5	5	5.50

ii. The forecast sales for July shows a 10% increase and 20% drop of sales is expected during November in the year.

iii. The inventory policy is to keep stocks of finished goods at 30% of the following month's sales and to keep stocks of raw materials at 20% of current month's requirements.

iv. Some balances as on June 1 as follows;

a. Opening stock of raw materials - 380 kgs.
b. Customer receivables from April sales - Rs. 28,000
c. Customer receivables from May sales - Rs. 46,000
d. Supplier payables for April purchases - Rs. 5,000
e. Supplier payables for May purchases - Rs. 12,000

v. Selling price has remained unchanged so far and is expected to continue until end of July, 2015.

vi. 30% of sales are received in cash and the balance on credit, which are collected on average, 60% during the next month and balance in the second month from sales.

vii. As part of its expansion programme, the company's strategic plan indicates that a loan of Rs. 6 million is expected in September and a payment of advance for the contractor amounting to Rs. 3 million in the same month.

viii. Suppliers are paid; 25% in the current month, 50% in the next month and the balance in the third month. Balance payable at the beginning of July will be Rs. 128,000, which consists of Rs. 38,000 for April, Rs. 42,000 for May and the balance for purchases for June.

ix. Raw materials are used at 1kg per 10 units of production and are purchased at Rs. 12 per kg.

x. The bank has granted a grace period of two months for repayment from the month it is released.

Required

a. Prepare for the four months July to October 2015

   i. Production Budget

   ii. Materials Purchases Budget

(12 Marks)

b. Show relevant figures in the Cash Budget for the four month period.

(3 Marks)

(Total 15 Marks)

Section III

Answer **ALL** the Questions

Case Study

In a Multinational Enterprise (MNE) operating in Sri Lanka the Mother Company; the Centre is in Switzerland. The subsidiaries of this MNE are organized across the globe under various zones namely Europe, Latin America, North America, Africa, Middle East and AOA (Australia, Oceanic and Asia). The zones are divided into regions. Sri Lanka belongs to the South Asian Region (SAR) of the AOA zone. The SAR constitutes three countries namely India, Bangladesh and Sri Lanka. The main office of the SAR is in India being the largest market. In Sri Lanka, the Head Office is in Colombo and the factory is in Pannala. The key functional areas related to the Sri Lankan subsidiary are finance, supply chain, human resources, marketing and production. The management accounting (MA) is a separate area in the finance function.

In the Sri Lankan subsidiary an Enterprise Resource Planning System (ERP); 'Systems, Applications, and Products' (SAP) is being implemented for data processing. This will converge the Sri Lankan subsidiary to all other subsidiaries and also the mother company in the process of information sharing. Moreover, there is an intranet which disseminates guidelines on work from the Centre to the subsidiaries. The Centre in Switzerland has teams appointed to understand the best practices adopted across the globe. The guidelines disseminated across the globe via the intranet have been developed considering these best practices. These guidelines provide clear directions to be followed in every aspect relevant to the business. Relevant to MA too, there are guidelines to be followed. Any updates relevant to these guidelines are also received via the intranet.

The Centre has three main objectives; having a common business architecture with global best practices, standardization of data, and standardization of the information technology (IT) platform. The guidelines to be followed when carrying out the MA function contribute towards, a common business architecture as these guidelines are followed by all the subsidiaries of this MNE across the globe. The SAP provides a standardized IT platform and it also contributes towards standardization of data, as similar data will be fed into to the system as input and similar reports will be obtained as the output by all the subsidiaries across the globe.

When preparing the operational plan / budget for the year, the MA professionals have to coordinate and communicate with all other functional areas. The head of management accounting said;

"When preparing the operation plan for the year, marketing and sales personnel will get together and determine the volumes. Our contact point is the demand planner who is an engineer from the supply chain function. He provides us the volumes and the volume is compared with the previous year's sales quantity and this is the real internal growth (RIG). The Indian office should approve this for the year. The volume figures are then given to the factory for costing. For each and every stock keeping unit (SKU) costing is carried out. The marketing and sales personnel provide the prices at which these products can be sold. The MA section determines all other general expenses that have to be incurred and finally arrives at the Earnings Before Interest and Tax. If the Indian regional office is not happy with the EBIT we have to go through this entire process again. The MA section acts as the mediator for communication between various functions. This operational plan is reviewed every month and there is dynamic forecasting…"

When preparing the operational plan the factory provides the cost of production. The MA professionals will raise various queries regarding the cost of production. They will also raise queries relevant to the salaries of the administration staff, which are provided by the human resources function which is incorporated under general expenses when calculating the Earnings Before Interest and Tax (EBIT). The impact of different marketing strategies is determined by the professionals in the sales and marketing functions together with the MA professionals by carrying out simulations. The prices provided by the supply chain function will be queried by

MA professionals by doing a trend analysis. When preparing the capital budget the capital investment decisions for machinery by the engineers in the factory will be carried out based on the guidelines provided relevant to the manufacturing technology. However, the financial feasibility will be decided by the engineers together with the MA professionals by carrying out an investment appraisal. Such collaboration will be required to work according to the guidelines provided by the Centre and to provide information and obtain information required by an integrated information system such as SAP. This collaboration within the business organization will be seen in all subsidiaries across the globe of this MNE.

Required

a. Critically assess the role played by the MA professionals in this MNE.

(10 Marks)

b. Discuss what factors have contributed to the adoption of Western MA Practices within this subsidiary.

(09 Marks)

c. When preparing the operational plan/budget for the year, the sales budget is prepared first. How prudent is this practice.

(08 Marks)

d. Discuss, how standard cost information will be useful when setting the operational plan/ budget for the year.

(08 Marks)

(Total 35 Marks)