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

YEAR I SEMESTER II (Group B)
END SEMESTER EXAMINATION – OCTOBER 2014

AFM 10430 Intermediate Management Accounting

Date	:	31st October 2014
Time	:	5.30 p.m. – 8.30 p.m.
Duration	:	Three (03) hours

Instructions to Candidates:

- This paper consists of two sections (A and B).
- Section A – Answer ALL questions in the separate sheet provided
  Section B – Answer **four** out of five 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. The Net Present Value (NPV) technique computes:
   a. Present value of future cash flows of a project
   b. Present value of present cash flows of a project
   c. Future value of future cash flows of a project
   d. Future value of present cash flows of a project
   e. None of the above

Information required for questions 2 and 3 is as follows

A manufacturing group of companies XYZ Group has two divisions: Division A and Division B. Division A produces the 'X' product, half of which is transferred to Division B and the balance sold externally.

The following details for Division A and B are available:

	Division A (Rs.	**Division B** **(**Rs.)
External sales revenue		
Division A @ *Rs.* 45 per unit	270,000	
Division B @ Rs. 100 per unit		600,000
Variable cost per unit	22	20
Fixed cost	120,000	150,000

Division A and Division B absorb fixed costs on the basis of production volume.

2. The profit or loss of XYZ Group:
   a. Loss of Rs. 156,000
   b. Profit of Rs. 216,000

c. Profit of Rs. 96,000
d. Profit of Rs. 348,000
e. Profit of Rs. 156,000

3. When the *Fixed cost plus 20%* margin transfer pricing method is used, the profit / loss of Division A and Division B:
   a. Division A Rs. 42,000 Profit and Division B Rs. 258,00 Profit
   b. Division A Rs. 42,000 Loss and Division B Rs. 258,000 Profit
   c. Division A Rs. 258,000 Profit and Division B Rs. 42,000 Loss
   d. Division A Rs. 42,000 Profit and Division B Rs. 258,000 Loss
   e. Division A Rs. 258,000 Profit and Division B Rs. 42,000 Profit

Information required for questions 4, 5, 6 and 7 is as follow:

'A' Plc is considering investing on a printing machine at a capital cost of Rs. 300,000. The machine will have a useful life of four years. Annual running costs will amount to Rs. 276,000, including straight line depreciation of Rs. 70,000 per annum. The estimated disposal value of the machine at the end of year 4 is its net book value.

The printing capacity of the machine will be 6 million copies per annum for the first and second years *and* 5 million copies per annum for the third and fourth years. The company expects to sell all that the machine produces. Average contribution will be Rs. 60 per 1,000 copies.

'A' Plc's cost of capital rate is 25%.

4. Assuming that all cash flows occur evenly, the Payback Period:
   a. 0.83 years
   b. 1.92 years
   c. 1.95 years
   d. 2.09 years
   e. 0.80 years

5. The average Accounting Rate of Return (ARR), based on the initial investment:
    a. 18.0%
    b. 19.7%
    c. 65.3%
    d. 72.0%
    e. 19.0%

6. The Net Present Value (NPV):
    a. Rs. (16,628)
    b. Rs. 16, 628
    c. Rs. (8, 428)
    d. Rs. 8,428
    e. Rs. (16,000)

7. The Internal Rate of Return (IRR):
    a. 29%
    b. 25%
    c. 26%
    d. 27%
    e. None of the above

8. Which of the following statements is true, regarding *price skimming?*
    a. The initial high price is kept constant
    b. The initial product price is set high giving short-term profits and then the price is gradually lowered.
    c. The initial product price is set high and raised
    d. The initial product price is set low and raised
    e. Initial price is kept high

9. What is the most appropriate statistical technique that could be used to determine, how reliable potential activity measures / cost drivers are, in predicting the dependent variable i.e. cost or revenue?
    a. Coefficient of Determination
    b. Scatter graph method
    c. Least squares method
    d. High low method
    e. Coefficient of Variation

Information required for question 10 is as follows:

The manager of the Container Manufacturing Division of XYZ Ltd has prepared the following forecast for the following year:

	Rs.
Operating profit	85,000
Depreciation	20,000
Net current assets at beginning of year	30,000
Net book value of fixed assets at beginning of year	180,000

The company's cost of capital is 25%.

10. What is the forecast Return on Investment (ROI) and Residual Income (RI) for the division, based on beginning of year Balance Sheet values?

	Return on investment	**Residual income**
	%	**Rs.**
a.	31.0	12,500
b.	31.0	20,000
c.	36.1	20,000
d.	40.5	32,500
e.	31.0	32,500

(Total 20 marks)

Section B

Answer **four** out of five questions

Question No. 01

The following estimated information relates to a manufacturing company 'X Limited' for the year 2014.

Month	Sales (Rs.)	Materials Purchased (Rs.)	Wages (Rs.)	Overheads	
				Production (Rs.)	Administration Selling& Distribution (Rs.)
June	6,000	3,600	1,300	450	320
July	6,500	4,000	1,500	450	320
August	7,000	4,000	1,500	500	300
September	7,500	4,500	1,500	600	300
October	8,000	4,600	1,600	600	400
November	8,500	5,000	1,800	700	300
December	9,000	5,200	2,000	700	100

Additional Information:

1. Only 10% of sales are on cash basis and the balance is received during the following month.
2. A credit period of two months has been received from the material suppliers (creditors).
3. Wages of a given month are paid in the following month.
4. 50% of total overheads of a month is paid during the current month and the balance is settled during the following month.
5. Cash and Bank Balance on 1st October 2014 is expected to be Rs.7,000
6. a. Plant and machinery are to be purchased in August at a cost of Rs.48,000 and the price will be paid in monthly installments of Rs.1,000 each from 1st October, 2014.

   b. Preference share dividends of 5% on capital of Rs. 100,000 are to be paid on 1st November 2014.

   c. Dividends from investments amounting to Rs.500 are expected to be received on 31st December 2014.

   d. Income Tax of Rs. 1,000 is to be paid in December 2014.

Required

a. Cash Budget for the three months ending 31st December 2014.

(12 marks)

b. Explain the purpose of a cash budget.

(8 marks)

(Total 20 Marks)

Question No. 02

The following standard cost and quantity information is given relating to one unit of product S manufactured by V Ltd.

Direct material	5 kgs at Rs. 50 per kg
Direct labour	4 hours at Rs. 70 per hour
Variable overhead cost	Rs. 140
Selling price	Rs. 1,000

Fixed overhead cost absorption rate is Rs. 40 per direct labour hour.

Budgeted information

Production	5,000 units
Sales	4,800 Units
Direct labour hours	20,000
Variable overhead cost	Rs. 700,000
Fixed overhead cost	Rs. 800,000

Actual information

Purchase cost of 23,400 kgs of materials	Rs. 1,287,000
Direct labour cost for 16,000 hours	Rs. 1,200,000
Variable overhead cost	Rs. 639,000
Fixed overhead cost	Rs. 688,000
Opening stock (Finished goods)	200 units
Closing stock (Finished goods)	300 units
Production	4,500 units
Sales	Rs. 4,620,000

There were no material or work-in-progress stocks at the beginning or at the end of the period.

Required:

a. Calculate the following variances and state whether each variance is favourable or adverse.

  i. Material price
  ii. Material usage
  iii. Direct labour rate
  iv. Direct labour efficiency
  v. Total variable overhead
  vi. Fixed overhead expenditure

(18marks)

b. What are the pre-requisites of standard costing, in relation to a manufacturing organization?

(2marks)

(Total 20 marks)

<u>Question No. 03</u>

A private institution is to establish a 'School of Accounting and Business' (SAB) to conduct an accounting undergraduate degree programme. The management of the SAB will be carried out by the Board of Management (BoM) headed by the Director. The BoM will consist of 11 members representing academic, business and public interests. The academic affairs of the SAB will be carried out by a Board of Studies (BoS) headed by the director of SAB. The BoS consists of 12 members. The Heads of the academic departments of SAB will also be members of the BoS. Initially SAB will have two academic departments namely, Department of Accounting and Finance *and* Department of Economics, Management and Business Communication. More departments will be incorporated in the years to come depending on the demand and growth of the School. At the initial stage, the undergraduate programme will be limited to the B.Com. Accounting Degree.

The duties assigned to the academic staff members appointed to the academic departments will be to develop the curriculum, carry out the teaching learning process, set the examination papers, carry out evaluations, provide academic guidance to the students and carry out research studies and consultancy assignments. The non-academic staff members will carry out the following tasks in the respective functions; finance, student admissions, conducting examinations, human resources management and career guidance for students.

The mission of SAB is to be the most sought business school for undergraduate academic studies in accounting within the South Asian Region. To accomplish this, the Board of Management has decided that the SAB activities should be managed using a Balanced Scorecard.

Required

a. State two factors, which should be considered, when implementing the Balanced Scored, at SAB.

(4 marks)

b. Name the four perspectives of the Balanced Scorecard and briefly state what is meant by each perspective.

(6 marks)

c. Determine a performance measure for each of the four perspectives of the Balanced Scorecard when managing the performance of SAB.

(4 marks)

d. The four perspectives of the Balanced Scorecard are linked to each other through a clear cause and effect relationship. Explain this in relation to SAB.

(6 marks)

(Total 20 Marks)

<u>Question No. 04</u>

Sri Lankan subsidiary of a cement manufacturing and selling Multinational Enterprise (MNE) where the mother company is in Switzerland, there are over 10 management accounting professionals. The mother company standardizes all activities carried out within the subsidiaries. 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 with all other subsidiaries and 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.

One of the management accounting professionals working in this Sri Lankan subsidiary said;
"In the cement mill the clinker is ground with other raw materials and the output is sent for packing. In the factory at Galle clinker is imported and in the Puttlam factory clinker is manufactured. During the course of the month all the expenses incurred on production and packing of cement is posted based on the double entry system by the financial accounting function. The management accounting obtains the information relevant to the expenses from the financial accounting function and allocates all these expenses incurred to the cost elements that have been determined by the mother company. From one cost element cost apportionment and reapportionments are made to another where finally the cost elements relevant to the finished products will have all the relevant costs being apportioned using a basis of apportionment. All this is done using the ERP system SAP. At the end of the month considering the revenue and the cost element information the monthly management accounts are prepared."

As explained above, an activity based costing approach is followed in determining the actual cost of production by the management accounting professionals in this organization. This management accounting professional also said; when budgets are prepared, that the sales function will provide the sales details based on the economic outlook of the country and market intelligence. The production function will provide the production quantities and it will be necessary to tally the available capacity and the sales quantities. Thereafter, the quantities to be produced for the year will be determined. During this process the capital expenditure decisions are also made. After determining the quantities for the year, all the functional areas will state the costs that have to be incurred to complete the production required for the year. This is the budgeting process. The management accounting is also involved in analyzing whether purchasing clinker is cheaper or whether it is cheaper to manufacture the clinker. The management accounting is also involved in determining the prices to be charged for the finished products. The management accounting professionals continue to liaise with the professionals in the other functional areas when performing work, for example production, marketing, procurement, IT, human resource management and logistics to look into the distribution channels.

Required:

a. Evaluate the role played by the management accounting professionals in this MNE.

(12 marks)

b. In the present day context in the strategy making process the bottom line has been broadened to a triple bottom line. Describe what is meant by the triple bottom line?

(4 marks)

c. In the production of clinker there is emission of carbon dioxide, which contributes towards environmental pollution. Moreover, the employees within this organization are exposed to various risks when handling machinery. What are the measures that could be taken to minimize these risks? Discuss

(4 marks)

(Total 20 marks)

<u>Question No. 05</u>

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

a. Boston Consultancy Group (BCG) Growth Share Matrix

(5 marks)

b. SWOT Analysis

(5 marks)

c. Porter's Five Forces Analysis

(5 marks)

d. Porter's Generic Strategies

(5 marks)

(Total 20 marks)