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Serial No.....

Institute of Certified Management Accountants of Sri Lanka
Strategic Level
May 2012 Examination

Examination Date : 19th May 2012 **Number of Pages :** 07
Examination Time: 9.30 a.m. – 12.30 p.m. **Number of Questions:** 05

Instructions to Candidates

1. Time allowed is **three (3) hours**.
2. Total: **100** Marks.
3. Answer **all** questions in **Part I** and any **three (3)** questions from **Part II**.
4. The answers should be in the **English Language**.

<u>Subject</u>	<u>Subject Code</u>
Strategic Management Accounting	(SMA / SL 1 - 401)

PART I

Answer **all** questions

Question No. 01 (40 Marks)

The Mother Company (The Centre) of a Multinational Enterprise (MNE) operating in Sri Lanka 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 of 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 coming under 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 with all other subsidiaries and also with 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 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.

The Head of MA said:

“There are audits being carried out by India (the regional office) in respect of Sri Lanka. They see whether we are following the stipulated guidelines. They will also identify loopholes and report to the Zone and thereafter to the Centre.”

The head of MA further said:

“Influence of the mother company has created a particular area called “management accounting” and much importance is given to it. All the local companies in Sri Lanka commenced the calculation of Economic Value Added only after we started.”

Yet another MA professional working for this MNE said:

“In the Western world there are supermarkets which are quite developed and therefore, the costs relevant to shelf space which is referred to in the guidelines will be different from ours. We have to understand and consider the relevant costs in the supermarkets operating in the Sri Lankan context”

This is an example where the context specific characteristics prevailing in Sri Lanka will come into play. These context specific environmental forces will bring in diverse problems. New strategic moves brought about by the competitors, government policy changes affecting the business, the natural disasters creating an impact on the business, and changes in the general economy are some examples which could affect the financial performance of the company. Consequently the practices suggested by the guidelines would be inappropriate. In which case, alternative practices will have to be arrived at. However the MA professionals will attempt to keep up to the guidelines as far as possible. If there is an alternative practice that is required and not stated in the guidelines, it will be necessary to obtain approval from the regional office in India.

This MNE is driven by two key performance indicators namely the ‘real internal growth’ (RIG) and ‘earnings before interest and tax’ (EBIT). The head of MA 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 volume and that volume is compared with the previous year’s sales quantity and ascertain 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 EBIT. If the Indian regional office is not happy with the reported 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 MA professionals have to coordinate and communicate with all other functional areas as explained by the head of MA. 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 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 in relation 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.

You are required to:

- (a) Describe the information that is required to be provided by the management accounting professionals to manage the Sri Lankan subsidiary in keeping with the two key performance indicators, “real internal growth (RIG)” and “earnings before interest and tax (EBIT)”. **(12 Marks)**
- (b) Critically assess the role played by the management accounting (MA) professionals in this Multinational Enterprise (MNE). **(10 Marks)**
- (c) Discuss what factors have contributed towards Western Management Accounting Practices coming into being within this MNE. **(10 Marks)**
- (d) In this MNE, there may be raw material transfers taking place from one subsidiary to other subsidiaries in order to make use of economies of scale relevant to purchasing. Discuss that how the transfer price should be determined in such instances. **(08 Marks)**

(Total 40 Marks)

End of Part I

Part II

Answer any **three (3)** questions

Question No. 02 (20 Marks)

A private institution is about 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 a Board of Management (BoM) headed by the Director of the SAB. The BoM consists 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 formed in the years to come depending on the expansion and growth of the School. At the initial stage, the undergraduate programme will be limited to the B.Sc. 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 BoM has decided that the SAB activities should be managed by introducing Balanced Scorecard System.

You are required to:

- (a) Name the four perspectives that could be viewed on an organization, as suggested by the Balanced Scorecard. **(04 Marks)**
- (b) Assess that how these four perspectives in the Balanced Scorecard are interrelated. **(08 Marks)**
- (c) Describe that how the Board of Management of this School of Accounting and Business could use key performance indicators under the four perspectives of the Balanced Scorecard to evaluate the performance of the academic and non-academic staff members. **(08 Marks)**

(Total 20 Marks)

Question No. 03 (20 Marks)

In an indigenous ceramic product manufacturing and selling business organization, a sample mould is made, when a sample of a product is received, from a customer, by the Sample Section. Using this sample mould, the required case moulds will be made by the employees in the Moulding Section and these employees in the Moulding Section make the working moulds using case moulds. The working moulds are sent to the Casting Section. In the Clay Preparation Section, based on a recipe using various raw materials and machinery, the employees manufacture filter press cakes which are sent to the Casting Section. Using the working moulds and the filter press cakes, the employees in the Casting Section cast the products either through drain casting, pressure casting or jiggering. After casting, the cutting and polishing activities are carried out by the employees in the Finishing Section. Thereafter, the units of products are sent for firing (kiln). The firing will be by means of gas or electricity and firing is carried out at various stages. At the kiln, there are employees to load and unload and to do the checking relevant to the kiln.

The firing of the cast products by the kiln is known as converting green ware to biscuit ware. The polishing of the product will be carried out by the employees in the Polishing Section. If the polished biscuit product needs to be painted or sprayed, it will be carried out by the employees in the painting and spraying section. To fix the paint to the product, a firing will be carried out. The painted or unpainted products are dipped in glaze by the employees in the Glazing Section, and to fix the glaze to the product another firing will be carried out. The final checking of the product is carried out by the employees in the Checking Section. Sometimes a decal or a sticker will have to be pasted on to the product, which will be carried out by the Completing Section. To fix the decal or the sticker to the product it is sent again for firing. Any other completing activities too will be carried out by the employees in the Completing Section. Finally the packing is carried out by the employees in the Packing Section.

The customer orders to be fulfilled during the month are scheduled at the beginning of the month and when each customer order is completed and goods are dispatched, an actual costing is carried out. The actual costs relevant to the materials and export charges are taken into account in the actual costing. However, as regards labour and overhead costs, pre-determined charges are accounted. The actual costing statements prepared in that way for all customer orders completed during a month reveals a profit. However, when the profit and loss account is prepared for the month, it reveals a loss. The Management Accounting Professional in this organization needs to obtain the services of a group of consultants to understand the reasons for this discrepancy.

You are required to presume that you are heading the group of consultants who have accepted the assignment of this ceramic company and discuss;

- (a) The major issues on pricing of customer orders, that would cause to have this discrepancy between the outcome of the monthly profit and loss account shown as a loss and the outcome of the actual costing statement prepared for all customer orders completed during a month shown as a profit.

(08 Marks)

- (b) Whether the Company would have a strategic advantage, if 'Activity Based Costing' is introduced to be practiced.

(12 Marks)

(Total 20 Marks)

Question No. 04 (20 Marks)

In a cable manufacturing and selling organization, there is a number of machine lines in operation. In each machine line, the first machine is the rod breaker machine. From the rod breaker machine, the broken rods are sent to the stranding machine. In this stranding machine, the rods are separated into pieces, according to the requirements. Then, separated pieces are sent to the excluding machine where the separated pieces are covered and sometimes there is yet another machine in the machine line named as the drum twister where around four covered cables are twisted together.

These are the normal operations that take place in every machine line. Altogether there are around 24 machines. All the machines are operated all 24 hours of the day, taking 10 hours for the day shift and 14 hours for the night shift. Therefore, the total machine capacity for a day is $(24 \text{ machines} \times 24 \text{ hours}) = 576$ machine hours and it is considered to be the optimum situation. There is a record book to make entries when the person in charge of the machine finishes a day shift or night shift and the work done i.e. the number of kilometers of cables worked on a machine and when there are machine downtimes, the applicable number of hours and reasons for it. The Management Accountant has designed a budgeting system for this organization. In doing that he said;

“To prepare the budgets, I spoke to one of my friend’s who worked for a brewery company. I also searched on the internet. After understanding how to prepare budgets for this specific organization, I spoke to the sales managers to get the sales quantities, selling prices and the discounts to be given. Based on that and the available machine capacity, the production budget was prepared. Based on that production budget, the raw material budget was prepared and the prices were obtained from the procurement people. Thereafter, information was obtained from the HR Division relevant to the direct labour costs. The other production overheads (water, electricity etc), administration, selling and distribution and finance costs were also calculated getting information from the relevant personnel. Finally the budgeted profit and loss account, balance sheet and cash flow forecast were prepared.”

He also said that the information was provided by the relevant personnel within the organization using an incremental approach. The budgets have been prepared for 5 years. There were no monthly reviews carried out in the past. The need for having such budgets prepared for the implementation and control had been highlighted by the Chief Executive Officer (CEO) who was an engineer by profession with over 30 years of work experience in the cable manufacturing and selling industry.

You are required to:

- (a) Identify the ‘Critical Success Factor’ in this case and explain why it is needed to be managed properly to bring this business organization towards successes. **(06 Marks)**
 - (b) Explain the required information that should be provided by the Management Accountant to the Chief Executive Officer and functional heads to manage the situation properly to overcome the critical success factor issue, within the business organization. **(08 Marks)**
 - (c) Critically assess that how the Western Management Accounting Practices could be made use to develop the management accounting practices within this business organization. **(06 Marks)**
- (Total 20 Marks)**

Question No. 05 (20 Marks)

A management accounting professional working for an export oriented garment manufacturing company attended a CMA conference that was organized in 2011. In making a presentation at this conference by a Resource Person, the following table too was shown.

CO2 Emissions in Countries

Country	CO2 Emissions (000 metric tons)	% Change 1990 - 2008
World	29,381,400	40.1%
China	6,508,200	194.3%
USA	5,595,900	14.9%
European Union	3,849,500	5.0%
UK	510,600	(7.0)%
Sri Lanka	12,200	226.3%

Listening to the presentation, this management accountant was pondering as to how much fossil fuel is used within his garment manufacturing company, contributing towards the Carbon foot-printing. He also gathered from the presentation that by 2020, sustainability reporting, that could be made by making use of Global Reporting Initiatives (GRI), will be made mandatory.

You are required to assume that you are the said management accounting professional who attended the conference and write a report to the functional heads discussing that;

- (a) As functional heads of a garment manufacturing company, how the Global Reporting Initiatives could be used by them as a guide when carrying out business activities in a sustainable manner for the company to commence the reporting on sustainability. **(10 Marks)**
- (b) With examples that how various business organizations could relate or have already related sustainability initiatives to their value chain. **(10 Marks)**

(Total 20 Marks)

End of Part II

Present value table

Present value of 1.00 unit of currency, that is $(1 + r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

End of Question Paper