 Serial No……………….

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

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| **Examination Date :** | 13th May 2012 | **Number of Pages :** | 07 |
| **Examination Time:** | 1.30 p:m. – 4.30 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 **three (3)** questions from Part II.
4. The answers should be in the **English Language.**

| **Subject** | **Subject Code** |
|---|---|
| **Risk & Control Strategy and Policy** | **(RSP / SL 4 – 404)** |

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**PART I**

Answer **all** questions

**Question No. 01 (40 Marks)**

**Background**

B&B is a listed company that design and assemble small passenger aircraft which it sells to regional air lines throughout the world. B&B is highly regarded by its airline customers for the quality of its air craft. B&B is also well reputed for meeting contractual commitments through on-time delivery. The company generates profits before interest and taxes at 7% of sales. However due to the depressed nature of the airline industry and competition from foreign manufacturers the company has modest growth targets.

**Marketing**

About 60 aircrafts are delivered each year. The company's competitive advantage is its ability to take a standard aircraft design and customize it to the varying needs of its customers. This includes changes in engine size, Passenger capacity, configuration, electronic equipment etc. The cycle time from signed order to delivery is about 18 months. B&B sells its completed aircrafts in the customer's currency. The fixed price is converted to B&B's home currency using the exchange rates applicable at the time contacts are signed. Progress payments up to 40% of the selling price on an order are made throughout the production process, but the balance 60% of the selling price of the air craft is made on delivery to the air line. This purchase price is typically paid by finance companies that provide lease finance to the air line. Any delivery delay to the airline is a breach of B&B's contract and will result in significant financial penalties to B&B.

**Production and Supply Chain**

The manufacture of all the aircraft components has been subcontracted to about 180 suppliers located across several countries. The cost of purchased components constitutes 70% of the final aircraft selling price. Suppliers are selected on the basis of quality, reliability and cost. Contracts with each supplier include prices established in the supplier's currency and expected price increases and anticipated efficiency savings over the next two years. This enables accurate forecasting of material cost by B&B. As each component is produced to satisfy each differing requirements of each air craft, any delay in receipt of any component will delay final assembly. A distribution company has the contract to transport all components to B&B's factory and bar-coding together with satellite tracking technology enables the location of all components to be identified on the way from dispatch from supplier premises until receipt by B&B.

There are five major production operations at B&B factory. Four relate to component assembly and one to final assembly. The four component assembly operations are fuselage (central body of the air craft), wings, engines, and electronics. All four components assembled brought together in a large hanger where the final air craft assembly takes place. B&B operates its factory on a just in time (JIT) basis to minimize inventory. Production schedule for each of the four component assembly operation must be integrated so that the final assembly can take place on schedule.

**IT Support**

B&B uses a sophisticated enterprise resource planning system (ERPS) to manage its supply chain, purchase ordering, production scheduling, accounting and performance management and customer relationship management. The company also relies on an electronic data interchange (EDI) system to track component purchase orders from their dispatch by suppliers to receipt at B&B's factory.

**Quality Control**

Aircraft manufacture is highly regulated with stringent quality control and safety requirements. B&B has always maintained the highest standards. The respective aircraft inspection agency undertakes regular inspections of components and final assembly quality in order to ensure annual relicensing of B&B as an aircraft manufacturer.

**Costing and Pricing**

Cost of each air craft is estimated from a bill of materials for components and a labour routing, both of which take into account the customization of each aircraft. Price negotiations follow the cost estimation process and discounts are given for quantity and significance of the customer to B&B in terms of past and anticipated sales.

Overhead costs are traced to products through an activity based costing system, based on cost drivers established for eight significant business prices. Profits are calculated for each aircraft and each order (which may be for several aircrafts) and customer profitability analysis is used to support future sales efforts.

**Risk Management and governance**

The Company has a risk management group at senior management level that maintains a register of major risks, carries out risk assessments in terms of their likelihood and consequences, identifies appropriate risk responses and reports to each meeting of the audit committee. IT risks and foreign currency exposures require highly specialized attention, and responsibility for these risks is delegated to the IT department and treasury department respectively.

The ERPS and EDI systems are managed by the in house IT department which has long serving and highly skilled staff who have developed comprehensive operating procedures and business continuity plans. B&B's treasury department primarily uses matching techniques to offset foreign exchange exposures in each country but does use forward contracts where exposures in some currencies are deemed unacceptable.

The Board of Directors emphasizes strategy and monitors sales and delivery performance. It aims to ensure that sales are spread evenly over different regions so as not to be disproportionately by political or economic changes. The general approach to risk management is to have a portfolio of customers, products and suppliers, so as to minimize sensitivity to any one factor that might jeopardize the company's success. The Board reviews assessments made by the aircraft inspection agency and is actively involved in rectifying any problems identified.

The Company's Audit Committee, composed of independent directors, monitors the risk assessment made by managers, ensures that internal controls are adequate and approves the Company's Internal Audit Plan each year. The audit committee also monitors all monthly financial performance while the internal audit function spends a considerable proportion of its resources ensuring that financial performance information produced by the ERPS is accurate for management decision making and financial reporting purposes.

**You are required to:**

(a) State the recommended components of any organization's risk management strategy and evaluate B&B's approach to risk management in terms of those components. **(15 Marks)**

(b) Identify the major categories of risks facing B&B and evaluate the controls adopted by B&B in relation to each category. **(15 Marks)**

(c) Risk treatment or risk response is an important component of risk management strategy. Explain what is meant by risk treatment and its benefits to Board of Directors. **(10 Marks)**

**(Total 40 Marks)**

End of Part I

## Part II

Answer any **<u>three (3)</u>** questions

**<u>Question No. 02 (20 Marks)</u>**

PSI is a new professional service carrying out a range of business services on behalf of Small & medium sized business clients. Apart from the principal, a qualified accountant who owns 100% of the business, and there are four professionally qualified and two support staff. The business model adopted by PSI is to charge an annually negotiated fixed monthly payment to its clients in return for advice and assistance in relation to budgeting, costing, cash management, receivables and inventory control, and monthly and annual management reporting.

The work involves weekly visits to each client by a member of staff and a monthly review between PSI's principal and the Chief Executive of the client company. In delivering its client services PSI makes extensive use of specialist accounting software.

The principal continually carries out marketing activity to identify and win new clients. This involves advertising, production of brochures, and attending conferences, exhibitions and various business events where potential clients may be located.

The management of PSI by its principal is based on strict cost control, maximizing the chargeable hours of staff and ensuring that the payments charged are sufficient to cover the hours worked for each client over the financial year.

**You are required to:**

(a) Recommend management controls that would be appropriate for the principal to have in place for PSI. **(12 Marks)**

(b) Evaluate the likely costs and benefits of and internal control system for PSI. **(08 Marks)**

**(Total 20 Marks)**

**<u>Question No. 03 (20 Marks)</u>**

"Effective internal control, internal audit, audit committee and corporate governance are all inter-related". Discuss this statement with reference to:

(a) How internal audit should contribute to the effectiveness of internal control. **(08 Marks)**

(b) How an audit committee should contribute to the effectiveness of internal audit. **(06 Marks)**

Thilan was the management accountant of a small firm that was a part of a group of companies. His boss Nimal was the firm's CEO. Several months ago Nimal approached Thilan and questioned on some month end figures produced by Thilan, saying they must be wrong. At the time there was a certain amount of confusion because their firm has just taken over another small company. So Thilan adjusted them as instructed by Nimal. This happened in several more month ends until Thilan felt suspicious about Nimals behaviour and figured out that he is amending the data purely because the company was not performing as intended. Thilan raised this issue with Nimal and Nimal assured him that he will sort everything out. Relived that Nimal has recognized the matter, Thilan dropped it.

At the end of the firm's financial year, Nimal announced that he had as promised found a solution to the problem of ongoing adjustments. Unfortunately this was different to what Thilan was expecting. Nimal proposed, that Thilan admits that he owe up to the discrepancies and then resign to prevent any further questions from being asked. In return for this Nimal would give a glowing reference on the understanding of course that he kept quiet about the whole affair.

(c) From an ethical perspective, explain how Thilan should have handled this entire situation.

**(06 Marks)**
**(Total 20 Marks)**

**<u>Question No. 04 (20 Marks)</u>**

Equip PLC is a major exporter of agriculture equipment to Australia, New Zealand and Europe. All production facilities are in the United Kingdom. The majority of the raw materials and the tools are also sourced in the United Kingdom, with a few imports from Eire, priced in Sterling Pounds. Major competitors are based in the United States and Germany. There are plans to set up a manufacturing subsidiary in Australia, funded in part by an Australian dollar loan to be taken out by Equip PLC. The new manufacturing facility would be used to source the Australian and New Zealand markets

**You are required to:**

(a) Describe the potential currency exposures faced by this company before setting up the manufacturing subsidiary. **(06 Marks)**

(b) Consider the effects of setting up the new manufacturing subsidiary in Australia.
  (i) Will any of the exposures identified be reduced?
  (ii) What new currency exposure will the group face? **(06 Marks)**

(c) If the long term prospects for inflation in the United Kingdom and Australia are 2% and 6% p.a. respectively, what changes would you expect to observe in the following rates in the next 12 months?
  (i) GBP / AUD spot rate (currently GBP/AUD 2.68)
  (ii) UK and Australian 3 month interest rates (currently 6% for GBP and 8% for AUD)
  (GBD = Great Britain Pound; AUD = Australian Dollar)

**(08 Marks)**
**(Total 20 Marks)**

**<u>Question No. 05 (20 Marks)</u>**

IndusPro is a company manufacturing and selling a wide range of industrial products to a large number of businesses throughout the country. IndusPro is a significant Sri Lankan employer with 2,500 people working out of several locations around the island, all linked by a network computer system.

IndusPro purchases numerous components from 750 local and international suppliers receiving these in to a central warehouse. The company carries about 10,000 different inventory items, placing 25,000 orders with its suppliers each year.

The accounts payable department of IndusPro has six staff that process all supplier invoices through the company's computer system, and make payment to suppliers by cheque or electronic remittances.

**You are required to:**

(a) Identify the information system controls that should be in place for accounts payable in a company like IndusPro. **(10 Marks)**

(b) Explain the risk of fraud in accounts payable for a company like IndusPro and how that risk can be mitigated. **(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 | 0705 | 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