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Serial No.....

Institute of Certified Management Accountants of Sri Lanka
Strategic Level
October 2017 Examination

Examination Date : 29th October 2017 **Number of Pages :** 06
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. Candidates are allowed to use non-programmable calculators.
5. The answers should be in **English Language**.

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

PART I

Answer **all** questions

Question No. 01 (40 Marks)

LS Surgical supplies was founded 20 years ago by entrepreneur Mr. Nevil Perera who has been the company's chief executive since the outset. Incorporated as a private company, LS began by importing small surgical devices such as syringes and bandages, and selling them to hospitals, clinics and medical facilities. But the company began to grow rapidly when Mr. Nevil realised the potential of a growing market in knee and hip joint replacements as the population in many countries was rapidly ageing due to the wider availability of more effective, low cost medicines. Fifteen years ago, he began to manufacture the surgical hip and knee joints used for most joint replacement surgery. As a company operating in the surgical supplies industry, LS has always been subject to regulation and must complete compliance reports every year to declare that it is using surgical grade materials for its manufacturing and also that it maintains the requisite level of hygiene in its processes. These reports are a legal compliance matter and must be signed by two directors.

LS surgical supplies has been a private family (or 'insider') company throughout its history. Owned jointly by Mr. Nevil, his wife and brother, Mr. Nevil owns 51% of the shares, his wife, 20% and his brother 29%. All three are directors of LS surgical supplies. As the company grew, they sought to employ members of the extended family as much as possible, partly to provide them with jobs and partly to 'give a feeling of family' in the company. It was often described as a 'tight-knit' culture with family members occupying the senior positions and with few appointments made from outside the company to important roles. When the company grew to a certain size, Mr. Nevil decided that he needed a qualified accountant on the board of directors to help with investment appraisals, costing, cash flow management, compliance issues and financial reporting. He eventually appointed Nilu Fernando, a relatively inexperienced but ambitious person to the board. This was her first role as finance director. Nevil was known to be a strong and domineering person. Some former employees described him as a bully who was unable to discuss matters in a calm manner. He was described as quick to anger and capable of intimidating even his senior colleagues such that they would feel unable to challenge him at all. This was also the case with Nilu Fernando the new finance director. She found him overbearing and impossible to challenge. She always did as he asked, even when she felt uncomfortable with what she was being asked to do. When the joint replacement industry became more competitive, Mr. Nevil had the idea that he could reduce the company's unit costs by switching some of the surgical-grade materials used in manufacture for a cheaper industrial grade instead. Such a switch would be undetectable to the surgeons using

the artificial joints but did increase the risk of fracture and deterioration once the replacement joints were used in a patient. Mr. Nevil asked Nilu Fernando, as an accountant and finance director, to produce detailed costing calculations for the switch and to forecast how this change would affect profits. She also calculated the costs of re-tooling the factory to allow the industrial grade material to be used. Later, on Mr. Nevil's instruction, she approved the investment and oversaw the changes in manufacturing and the purchasing processes, in the full knowledge that such changes were both illegal and unethical. Mr. Nevil assumed that because many of the senior employees were family members, and that he could control Nilu Fernando, that the switch to industrial grade material would go undetected.

The problem came to the public attention some time later when joints made from the inferior material began to deteriorate and immobilise previously mobile patients. The industrial grade material used in the joints often caused infection in patients and some vulnerable patients died of the effects of the product failure. John Silva was the investigative journalist who brought the problems at LS to national attention. He thought that the problems arose as a result of an integrity risk and that the integrity failure was on the part of Mr. Nevil and Nilu Fernando. Mr. Silva's mother had received a LS hip joint and subsequently experienced a great deal of pain and distress when the joint deteriorated, producing some unfortunate side effects including blood poisoning. Although his mother was able to have the joint safely removed and replaced by a better quality artificial joint, John Silva researched further and found other patients who had not been so fortunate. It was John Silva's investigations into LS which alerted the regulatory authorities to the use of the inferior materials in the joints. It soon emerged that the cause of the increased failure of the implants was the use of the inferior industrial-grade material.

When the regulator responsible for the safety of surgical supplies discovered, thanks to John Silva's research, why the joints degraded, they investigated the use of the inferior materials. The legal officers investigating the case noted that two directors had signed the most recent compliance reports, certifying that the company was fully compliant with material usage and quality standards. These were Nevil and Nilu Fernando. John Silva was angry with LS surgical supplies, because of how his mother and others had suffered. He was particularly angry with Nevil and Nilu Fernando. As a business journalist, he often wrote articles on the behaviour and performance of listed companies. He became convinced that it was in the public interest for producers of surgical supplies, such as LS, to be subject to the regulatory requirements of listed companies. In a published article, he wrote:

...whenever I look at company failures such as that at LS, I become increasingly convinced that robust ways of embedding risk awareness and risk management are essential in all companies and not just in listed companies. It was the fact that Mr. Nevil could get away with his offences that is most worrying. He bullied a young accountant, Miss. Nilu Fernando, into highly unprofessional behaviour, and without the systems in place to enable the offence to be challenged internally, he initially got away with it. Had a whistleblowing system been in place, or a separation of roles at the head of the company, Mr. Nevil could not have done this terrible thing. Someone would have challenged him and told him not to be so unethical and arrogant.

The result is that, with such a high impact business risk having been realised, innocent people working for LS may lose their jobs whilst patients may have to suffer the effects of this for many years.

Once the case came to the public attention, Mr. Nevil was arrested and prosecuted for the illegal sale of non-compliant surgical materials. Nilu Fernando was also prosecuted and then investigated by her professional accounting body. After an appeal, she was 'struck off', thereby preventing her from working as an accountant in the future. The company itself was wound up after sales declined, and all 130 employees lost their jobs. Patients continue to suffer the effects of the defective joint replacements and will do for several years into the future.

You are required to:

- (a) Distinguish between the governance of a family-owned company like LS and a publicly listed company, and explain how Mr. Nevil may not have committed the offences he did if LS had been a publicly listed company. **(10 Marks)**
- (b) Criticise Nilu Fernando's behaviour as the finance director and a qualified accountant, and explain how she acted against the public interest. **(10 Marks)**
- (c) Briefly explain why some risks vary by industry sector and discuss why legal risk might be more relevant to surgical suppliers like LS than in some other industry sectors. **(10 Marks)**
- (d) Write an article for the specialist magazine *Lanka Fortune Companies* which covers the following points.
 - (i) Discuss the potential benefits which an effective non-executive chairman could have brought to LS. **(05 Marks)**
 - (ii) Explain, in the context of the case, how risk awareness, including integrity risk, might be embedded in a company like LS. **(05 Marks)**

(Total 40 Marks)

End of Part I

Part II

Answer any **three (3)** questions

Question No. 02 (20 Marks)

In Yaya Company, Operations Director Ben recently realised there had been an increase in products failing the final quality checks. These checks were carried out in the QC (quality control) laboratory, which tested finished goods products before being released for sale. The product failure rate had risen from 1% of items two years ago to 4% now, and this meant an increase of hundreds of items of output a month which were not sold on to Yaya's customers. The failed products had no value to the company once they had failed QC as the rework costs were not economic. Because the increase was gradual, it took a while for Mr. Ben to realise that the failure rate had risen.

A thorough review of the main production operation revealed nothing that might explain the increased failure and so attention was focused instead on the QC laboratory. For some years, the QC laboratory at Yaya, managed by Jane, had been marginalised in the company, with its two staff working in a remote laboratory well away from other employees. Operations director Ben, who designed the internal control systems in Yaya, rarely visited the QC lab because of its remote location. He never asked for information on product failure rates to be reported to him and did not understand the science involved in the QC process. He relied on the two QC staff, Jane and her assistant John, both of whom did have relevant scientific qualifications.

The two QC staff considered themselves low paid. Whilst in theory they reported to Mr. Ben, in practice, they conducted their work with little contact with colleagues. The work was routine and involved testing products against a set of compliance standards. A single signature on a product compliance report was required to pass or fail in QC and these reports were then filed away with no-one else seeing them.

It was eventually established that Jane had found a local buyer to pay her directly for any of Yaya's products which had failed the QC tests. The increased failure rate had resulted from her signing products as having 'failed QC' when, in fact, they had passed. She kept the proceeds from the sales for herself, and also paid her assistant, John a proportion of the proceeds from the sale of the failed products.

You are required to:

- (a) Explain typical reasons why an internal control system might be ineffective. (10 Marks)
 - (b) Explain the internal control deficiencies that led to the increased product failures at Yaya. (10 Marks)
- (Total 20 Marks)**

Question No. 03 (20 Marks)

ABC Ltd is a company based in Singapore. The company has recently concluded negotiations for the purchase of a machine from a UK based manufacturer valued at GBP 2,000,000. Payment is due in 6 months' time and the board of ABC Ltd is worried about possible depreciation of the Singapore dollar (S\$) against the Sterling Pound. The following information is available:

Spot exchange rate: S\$1.300/GBP – S\$1.350/GBP

3 months forward rate S\$ 1.285/GBP – S\$ 1.335/GBP

Options:

An over the counter call option on GBP that expires in 6 months has an exercise price of S\$ 1.33 and a premium of S\$ 0.03

An over the counter put option on GBO that expires in 6 months has an exercise price of S\$ 1.34 and a premium of S\$ 0.02

You are required to:

- (a) Determine the outcome of hedge in the options market if the spot exchange rate in 6 months is;
 - (i) Spot: S\$1.285/GPB – S\$1.320/GBP
 - (ii) Spot: S\$1.450/GBP – S\$1.500/GBP(10 Marks)
- (b) XYZ Ltd undertakes major investment projects; it takes on project risk. The risk in a project comes from various sources, and includes:
 - 1. Project specific risk
 - 2. Competitive risk
 - 3. Industry-specific risk
 - 4. Market risk

You are required to describe what is meant by each of these types of risks. (10 Marks)

(Total 20 Marks)

Question No. 04 (20 Marks)

K is a provider of music downloads on the Internet (also called MP3 downloads). K is based in a European country.

The company's financial statements are ready for statutory audit and the external auditors have just commenced work.

The company has an electronic library of 19 million different songs in 23 different languages which are available for downloading or listening to online.

Customers register online with K for a fee of \$10 a month. This fee allows customers to listen to songs online at any time during that month and also gives the right to download 10 songs each month to their own MP3 players. Additional songs can be downloaded for \$1 each.

When K's customers register they must enter into an agreement that permits K to collect the monthly fee from their credit card accounts. Customers who wish to cancel their agreement can do so at any time using a link on K's website. A member of K's administration staff then has to cancel the monthly payment from the customers' credit cards. Customers cannot cancel their monthly payments by contacting their credit card providers directly. This arrangement is standard practice in the provision of online services. It simplifies the relationships between customers, online vendors and credit card companies.

K purchases the rights to distribute and sell some songs outright (normally songs more than 10 years old). This is a flat fee paid by K. Other songs are paid for by K on a royalty basis: the artists are paid a fee of 25 cents every time one of their songs is downloaded by one of K's customers (irrespective of whether it is one of the 10 songs per month allowed in the monthly fee or an additional purchase).

K's music library, website, customer information and all financial accounting systems are maintained on K's own computer systems, which are located at K's head office.

You are required to:

- (a) Discuss FIVE factors that the external auditors should consider when performing a risk assessment of K's IT systems. **(10 Marks)**
- (b) K has been told by a major credit card company that several hundred of its customers had complained that fraudulent charges had been made to their credit card accounts for downloads from K's site. Initial investigations in K have been unable to determine either the validity of these claims or why additional charges may have been made.

Evaluate the risks to K of such complaints explaining how those risks could be alleviated. **(10 Marks)**
(Total 20 Marks)

Question No. 05 (20 Marks)

- (a) Explain the objectives and general principles governing an audit of financial statements (statutory external audit). **(10 Marks)**
- (b) At a board meeting of JGP Chemicals Limited, the directors were discussing some recent negative publicity arising from the accidental emission of a chemical pollutant into the local river. As well as it resulting in a large fine from the courts, the leak had created a great deal of controversy in the local community that relied on the polluted river for its normal use (including drinking).

A prominent community leader spoke for those affected when she said that a leak of this type must never happen again or JGP would suffer the loss of support from the community. She also reminded JGP that it attracts 65% of its labour from the local community.

As a response to the problems that arose after the leak, the JGP board decided to consult an expert on whether the publication of a full annual environmental report might help to mitigate future environmental risks. The expert, Professor AG (a prominent academic), said that the company would need to establish an annual environmental audit before they could issue a report.

You are required to explain the three stages in an environmental audit and explore, using information from the case, the issues that JGP will have in developing these stages. **(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