

**UNIVERSITY OF COLOMBO, SRI LANKA**  
**FACULTY OF MANAGEMENT AND FINANCE**

**Bachelor of Business Administration (Level II - Semester VII) Examination, June/July 2022**

**FIN 4243 - Risk Management and Insurance**

**Instructions.**

- Time allowed is Two (02) Hours.
- This paper comprises three (03) questions on four (04) pages.
- Answer All Questions.
- This is an open book and online examination.

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01.

Read the following case study and answer the questions given at the end.

Toyota's world class production methods and reputation for manufacturing quality cars contributed in taking the lead as the world's number one. Toyota was rated as the most efficient car maker in the world. Toyota secured their place as the world's largest car manufacturer, since they overtook world leader of automobiles, the General Motors (GM) in both production and sales by early 2008. However, their stay at the top did not last long. In 2011, Toyota lost its position as the world's biggest automobile manufacturer and fell in to the third place in the list. Jammed gas pedals that caused a sudden and unstoppable acceleration in the cars were first discovered in 2010 in Toyota's Lexus brand vehicles and finally the company had to recall over four million vehicles, which marked the beginning of a crisis. Though Toyota spent huge cost on product recalls and replacements, the damage created to its reputation for quality was irreversible. Toyota had to pay more than USD 1.1 billion to settle the lawsuit, one of the largest payouts ever for an automotive lawsuit.

Another unplanned disaster hit Toyota in 2011, which was the magnitude nine East Japan earthquake and tsunami. The Tohoku region is an auto making center that suffered great damage and loss of life. Toyota lost some of its invaluable human capital resources and the company had to shut down four assembly plants in Tohoku that made vehicles for Japan. On top of that, many of the small suppliers in the region used by Toyota to source parts and components had to stop their operations, putting a great pressure on Toyota's supply chain. As a result, Toyota had to finance millions of dollars to purchase components from new suppliers.

Amidst the disastrous situation, Toyota was also found to be having an aging and insufficient technology platform. Toyota needed their technology infrastructure to be consistent, reliable and support the business process and work of the staff instead of impeding it. In order to protect their customers, the customer related data need to be safeguarded from any data breaches. In addition, Toyota's modern production methods were all automated with the aid of computerized control systems, and it would be a threat to Toyota's competitive advantage if this information fell into the hands of rival auto makers.

As a global enterprise that make vehicles in 27 different countries and sells them in 175 countries, Toyota faced to a huge financial risk due to the massive drop of local sales and exports in 2011. Demand for automobiles depended to a large extent on general economic conditions in a given market, the cost of purchasing automobiles and the availability and cost of credit and fuel. Toyota's vehicle unit sales in Japan decreased during 2011 due to poor market conditions and increased competition driven by strong sales efforts of other domestic automobile manufacturers. Toyota's cash flows were shrinking and the company were exposed to various economic risks due to changes in foreign exchange rates, interest rates, certain commodity prices and equity prices. In order to manage the risk arising from financial assets, Toyota used a variety of financial instruments including marketable securities, equity investments, long-term and short-term debt and financial derivative instruments.

However, after embracing several drastic strategical changes, Toyota reclaimed the title of world's largest automobile maker in 2012, rebounding from the earthquake that damaged its factories and embarrassing recalls that ruined its reputation.

- i. Using the information given above, provide two (02) examples for each of the following risk categories with your reasons.
  - a. Pure fundamental objective risk
  - b. Pure particular subjective risk
  - c. Pure particular objective risk
  - d. Speculative particular objective risk

(16 Marks)

ii. "Different risks faced by a particular business organization are highly correlated and inter-dependent". Elaborate this statement using appropriate examples from the given case.

(08 Marks)

iii. Explain three (03) risk identification methods that could have been used by the Risk Management Team of Toyota, to identify the different risk exposures.

(10 Marks)

iv. Based on the information given, prepare a risk register consisted of following details.

- a. Description of the risk
- b. Risk category/ Source of risk
- c. Assessment of likelihood
- d. Assessment of severity
- e. Proposed risk management strategy
- f. Responsibility for risk management action
- g. Timeframe for risk management action

(16 Marks)

**(Total 50 Marks)**

02.

i. What are the basic characteristics of a valid contract and how does it relate to insurance?

(08 Marks)

ii. Mr. Jeewandara, a 45-year-old government servant, is the sole income earner of his family who lives with his wife and three daughters. Mr. Jeewandara decides to buy a life insurance policy, even though he finds it challenging to set aside some money for the monthly insurance premium. After being aware on different life insurance policies, he has decided to go for a "term life insurance policy" in order to financially support his dependents.

Do you agree with Mr. Jeewandara's decision? Justify your answer, comparing term life policy with endowment life policy.

(08 Marks)

**(Total 16 Marks)**

03.

i. Amerix PLC is an American multinational general merchandise retailer headquartered in New York and its branches are located in 4 countries; UK, France, Germany and Sri Lanka. Since there are substantial inter-branch payments among head office and other overseas branches, Amerix PLC's management has decided to adopt multilateral netting technique. Through multilateral netting, company expects to yield significant savings from reduced foreign exchange trading and improved intercompany settlement efficiency. US \$ has been identified as the common currency of transactions.

The net inter-office balances as at 31 December 2021 were agreed at:

<b>Paying Office</b>	<b>Receiving Office</b>	<b>Amount</b>
UK	USA	\$ 275,000
France	Germany	€ 735,000
USA	France	€ 576,500
Sri Lanka	USA	\$ 1,544,000
France	UK	£ 104,400

Determine the net payments resulting if the foreign exchange rates are \$ 1 = € 0.85 = Rs. 140 = £ 0. 635.

(14 marks)

ii. The Sri Lankan economy is currently facing one of its worst ever economic crisis since its independence in 1948. Using examples, discuss the impact of the current crisis on the following financial risks of the Sri Lankan commercial banking sector.

- a. Credit risk
- b. Interest rate risk
- c. Cash flow risk
- d. Exchange rate Risk

(20 marks)

**(Total 34 Marks)**

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