The Institute of
Chartered Accountants
of Pakistan

**Multi Subject Assessment Stage**

11 June 2019
3 hours and 30 minutes – 100 marks
Additional reading time – 15 minutes

# Management Professional Competence

**CRN:**

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**Name:** ______________________________

## INSTRUCTIONS

Read the instructions carefully:

**1.** Answer all **THREE** questions.

**2.** Write your Name and CRN on the front page of the **MAIN ANSWER SCRIPT** and CRN on the front page of the **SUPPLEMENTARY SCRIPT.** Do not write your Name, CRN or any other identification mark on any other portion of the main or supplementary answer script.

**3.** Answer to each question must begin on a new page and must be clearly numbered. Use both sides of the paper in your main and supplementary answer scripts.

**4.** Answer in black pen only.

**5.** You are allowed to write notes/comments on the question paper. However, you must write your CRN and name on the question paper at the space provided above before starting to write any notes/comments.

**6.** The questions in this paper have been prepared on the assumption that candidates do not have a detailed knowledge of the types of organisations to which they relate. No additional mark will be given to candidates displaying such knowledge.

**7.** Only **FIVE** original books duly bound are allowed.

# QUESTION 1

Premier Electronic Manufacturing Ltd (PEM) is a very large company with its head office in Karachi and is listed on the Pakistan Stock Exchange. PEM manufactures a wide range of industrial computer and electronic technologies. One of its most successful product areas in the past decade has been a heavy-duty laptop including complementary handheld electronic device which can withstand extreme outdoor conditions and is widely used by European construction, oil and gas, mining, and transport industries over the past decade.

The Extreme Weather Technology Devices, or EWTD-1 range, is known for its robustness due to its unbreakable soft outer plastic casing which can withstand high impact – a regular hazard when used out in the field. The devices connect to a company's network for upload and data synchronisation via a hardwired connection. This technology has worked well for many years with very low incidences of reported product failure, however, customers are increasingly requesting products with satellite connectivity available anywhere and wifi capability.

Historically, the product price and profit margin achieved by PEM on this range have been higher than the average for technology products due to the specialised nature of the product and a corporate customer base which is prepared to pay for enduring problem-free product performance.

All devices are currently manufactured in an industrial area near Karachi. PEM's main competitor is TuffTech, which was once the market leader for industrial extreme weather computer devices. TuffTech has been in the market for over a decade, a year longer than the EWTD-1 range, but consumers have complained that its products suffer from abnormally poor battery performance. As a result, TuffTech's market share in Europe has fallen to approximately 45%, with PEM supplying the remaining 55%.

Sales of the EWTD-1 range have been static in the past year and the directors of PEM are concerned that the EWTD-1 range will decline over the next five years due to expected product and technology innovations by TuffTech and other new technology firms entering the market.

Without significant investment in research and development into smart devices, wireless technology and improved software, the board believes plans for product development by TuffTech and possible new market entrants attracted by high profit margins will erode PEM's existing European market share.

Five years ago, PEM attempted to enter the Asian and Chinese markets, but was unsuccessful due to trade barriers at that time. This region is now believed to be a significant growth opportunity due to the rapid expansion of the Chinese construction and energy industries and government support in that region. A new opportunity to manufacture the EWTD-1 range in Malaysia has been received from the Malaysian Government which is set out in Appendix 1.

**Enhanced EWTD-2 range research and development**

The development of new smart technology to create an enhanced EWTD-2 range is expected to take up to four years. This update will require the development of new hardware and software technologies which will include 'anywhere' satellite uplink technology and utilise cloud-based computing. However, the expected research and development costs are significant, and it will be challenging for PEM to fund new research and development out of existing operations. PEM must therefore look for an alternative funding strategy to raise the necessary capital to commence the enhanced EWTD-2 range research and development project.

**Requirements**

(a) Analyse PEM's strategy of continuing to operate in the heavy-duty laptop and handheld electronic devices market using the Porter's five forces model. **(10 marks)**

(b) Using the APV method, evaluate whether or not PEM should undertake the project to produce the EWTD-1 range in Malaysia by applying project acceptance criteria. ***(All cash flows arise at the end of the year unless otherwise specified)***
**(20 marks)**

(c) Comment on the appropriateness of (i) PEM using the APV method to evaluate the EWTD-1 project and (ii) the other assumptions made in determining the base case NPV.
**(09 marks)**

(d) Advise on three practical elements which will be essential for the successful implementation of the project to manufacture the EWTD-1 range in Malaysia. **(06 marks)**

(e) Prepare a briefing paper for the board of directors of PEM which outlines the tax consequences of starting production in Malaysia. **(05 marks)**

**Total: 50 marks**

## APPENDIX 1 – NEW MANUFACTURING OPPORTUNITY

The Malaysian Government has suggested PEM to extend its manufacturing base to Malaysia. The Government has recently invested in a new industrial zone which offers state-of-the-art manufacturing facilities to attract international technology companies to the country. Relocating to Malaysia would be expected to provide PEM with access to the Asian and Chinese construction and energy markets to promote the EWTD-1 range. The Government of Malaysia has stated that they will legislate all new Malaysian public and private construction projects to adopt EWTD-1 devices and software as standard in an effort to improve the quality and reputation of Malaysian construction industry. This will hopefully enhance the reputation of the Malaysian construction industry as a high-tech, quality provider, and therefore better equipped to compete with Chinese construction companies operating in the region.

The board of directors considers it strategically vital that PEM is ready to launch an enhanced EWTD-2 range to the European market in four years. However, they are uncertain whether forecast sales of the EWTD-1 range in Malaysia and other Asian and Chinese markets over the next four years will generate sufficient net surplus cash flows to fund research and development to design the enhanced EWTD-2 range.

PEM has failed to penetrate the Asian and Chinese markets from its existing base in Pakistan. It considers a local manufacturing plant in Malaysia with government support to provide a significant opportunity for growth in these markets. The directors also believe that PEM will benefit from lower costs of production and has greater access to technically skilled labour which the company is currently struggling to recruit and retain in Pakistan.

Therefore, the directors of PEM must consider whether or not to accept the Malaysian Government's offer and set up an additional manufacturing facility to supply the Asian and Chinese markets. The directors also need to determine if additional net annual surplus cash flows generated by the project will be sufficient to fund the research and development costs required to create the enhanced EWTD-2 range. The directors of PEM have provided forecast project revenue and cost assumptions to manufacture the EWTD-1 range in Malaysia. These assumptions are included in Appendix 2.

## APPENDIX 2 – MALAYSIAN MANUFACTURING FORECAST PROJECT REVENUE AND COSTS

The following information relates to the production of the EWTD-1 in Malaysia.

The Malaysian project will require an initial investment of MYR 300 million in total, which will pay for the cost of land and buildings (MYR 150 million) and necessary plant and machinery (MYR 150 million).

PEM will also require working capital of 20% of the forecast sales revenue for a given year, after inflation, to be in place at the beginning of each year. The working capital will be released at the end of year 4. The project is expected to be sold to the Malaysian Government for MYR 240 million, which comprises MYR 120 million for land and buildings and MYR 120 million for plant and machinery.

It is estimated that it will take approximately four months to complete factory set-up and labour recruitment and training, after which production will commence. Forecast production volumes are based on construction activity information supplied by the Malaysian Government with 15,000 units in the first year, rising to 32,000 units in second year, 40,000 units in third year and 50,000 units in the final year.

The following average price, cost per unit and total fixed costs are forecasted to apply in the first year of operation:

- Each EWTD-1 will be sold for MYR 8,500 per unit.
- The variable cost to manufacture each EWTD-1 device will be MYR 5,000 per unit. This cost comprises locally sourced materials, labour and other variable costs of production but excludes accounting depreciation relating to plant and machinery.
- Total fixed costs for the first year of production will be MYR 30 million.

From year 2 onwards, revenue is expected to increase by Malaysia's rate of inflation of 2% per annum, but variable and fixed costs are expected to rise by 4% per annum due to the specialist nature of skilled labour required which is in short supply.

The directors of PEM expect Malaysian tax to closely follow Pakistan tax rules with corporation tax of 29% per annum and allowable initial and normal tax depreciation of 25% and 10% respectively for plant and machinery. Land and buildings will not be eligible for tax depreciation allowances.

Proposed project finance is explained in Appendix 3. Information about the current system of government is included in Appendix 4. Finally, the directors of PEM have set out specific acceptance criteria in Appendix 5 which the project to manufacture the EWTD-1 range in Malaysia must exceed in order for it to be accepted by the board.

## APPENDIX 3 – PROJECT FINANCE

The current commercial borrowing rate in Pakistan is 9% but the Malaysian Government has offered PEM a 5% subsidised loan for the MYR 300 million required plus the value of the working capital required at the beginning of the project. The Malaysian Government has agreed that it will not ask for the loan to be repaid until year 4 on condition that PEM undertakes to manufacture the EWTD-1 range in Malaysia for the next four years.

PEM is listed on the Pakistan Stock Exchange with 100 million shares currently trading at Rs. 325 per share and Rs. 15,000 million 7% corporate bond trading at a 20% premium to their nominal value. PEM's most recently quoted equity beta is 1.87. The current risk-free rate of return is estimated at 3.1% and the market risk premium is 5.75%.

Due to the international nature of the project, the directors estimate that the beta applicable to the project if it is all-equity financed will be 0.2 more than the current all-equity financed beta (or asset beta) of PEM.

The current spot exchange rate between the Malaysian ringgit and the Pakistan rupee is MYR 0.029 per rupee. Annual general inflation rates are currently 5% in Pakistan and 2% in Malaysia. It can be assumed that these inflation rates will not change for the foreseeable future. All net cash flows arising from the project will be remitted back to PEM at the end of each year.

## APPENDIX 4 – GOVERNMENT IN MALAYSIA

There are two main political parties in Malaysia and elections are due in two years' time. If the current ruling party loses the next elections, then the current opposition party will be expected to increase taxes and review the terms of all existing commercial contracts awarded to internationally owned businesses. In a worst case scenario, the new government administration could terminate existing international contracts where these could be operated instead by Malaysian companies.

**APPENDIX 5 – PROJECT ACCEPTANCE CRITERIA**

To accept the Malaysian project, the PEM's Board of Directors have determined it will require:

(a) An overall surplus, in present value terms, based on the adjusted present value (APV) investment appraisal technique. The directors have assumed that PEM's debt beta is zero.

(b) Minimum project net cash flows of Rs. 1,000 million at the end of year 2, year 3 and year 4 which will be required to continue financing the development of the enhanced EWTD-2 range for launch in Europe in four years' time.

The directors of PEM are very keen to know if the Malaysian project meets both of these criteria.

# QUESTION 2

Better Gardens (BG), an importer and distributor of garden products, sources mostly from large multinational suppliers and sales to garden centres throughout Pakistan. It is growing rapidly, having an excellent reputation for prompt delivery and good service. It is 100% owned by Laila Kalim, a former garden designer who founded the business 15 years ago using her savings and a legacy from a wealthy relative. She receives a significant dividend from the company and would like this to continue.

The company has just secured the exclusive rights to sell Groundoff weedkiller products in Pakistan. This is one of the most popular brands of weedkiller internationally but has not been sold in Pakistan before and demand is expected to be high. The contract for exclusive rights will last for five years, although there is an option to extend it for a further five years if both parties agree.

Groundoff is manufactured by Vertigin, a large American company. Last year, a study published by an international health organisation claimed that a key ingredient in Groundoff may cause cancer. However, Vertigin vigorously contested this, and national and international regulators do not consider the evidence sufficient to ban or restrict the product. Sales of Groundoff seem to have been unaffected by the incident.

BG currently operates from one site in Lahore. Laila wishes to expand the company, in particular opening new warehouses to provide better coverage for deliveries across the country. She will need to raise Rs. 87 million to carry out this expansion.

Laila is a keen entrepreneur and focuses more on sales and negotiations than the details of running the company. In the interests of building a strong relationship, she often agrees extended credit terms with her largest customers. Even these are often not enforced by the credit control team, who are understaffed and have low morale. However, her team always pays her suppliers promptly, which again she sees as important in order to protect her trading relationship with them. The average payment time for debtors and creditors in BG's industry is 50 days.

Laila is considering a number of options to finance the expansion, although she is keen not to dilute her control of the business. A friend who is an accountant has suggested that she should be able to generate the necessary Rs. 87 million by better management of internal operations. She has advised that most companies in the sector are much more aggressive than Laila is in their management of working capital, including holding 65 days of inventory, and they have average gearing of 40%. The friend has also suggested that before going ahead with the expansion, it would be a good idea to analyse the risks it involves, and potential mitigating strategies.

**Requirements**

(a) Evaluate, with calculations **(Appendix)**, whether Laila could raise the necessary funds for expansion from better management of working capital, and what changes would be necessary to do so. Briefly consider alternative possibilities for funding. State your recommended approach to funding with justification. **(15 marks)**

(b) Discuss key additional risks the business will face if the expansion goes ahead and suggest mitigating strategies. **(10 marks)**

**Total: 25 marks**

## APPENDIX – EXTRACTS FROM THE FINANCIAL STATEMENTS OF BETTER GARDENS AT 31 MARCH 2019

### Statement of financial position

| | Rs. in million |
|---|---|
| Property, plant and equipment | 277 |
| Intangible assets | 20 |
| **Total non-current assets** | **297** |
| | |
| Inventories | 62 |
| Trade receivables | 62 |
| Cash and cash equivalent | 6 |
| **Total current assets** | **130** |
| **Total assets** | **427** |
| | |
| Share capital | 300 |
| Retained earnings | 43 |
| **Total equity** | **343** |
| | |
| Long-term borrowings | 55 |
| **Total non-current liabilities** | **55** |
| | |
| Trade and other payables | 25 |
| Current tax payable | 4 |
| **Total current liabilities** | **29** |
| **Total equity and liabilities** | **427** |

### Income statement

| | Rs. in million |
|---|---|
| Revenue | 320 |
| Cost of sales | (275) |
| Gross profit | 45 |
| Administrative expenses | (20) |
| Finance costs | (3) |
| Profit before tax | 22 |
| Tax expense | (4) |
| Profit for the period | 18 |

# QUESTION 3

Luxury Cars Karachi (LCK) was founded in 1965 in Karachi by Mohammed Khawaja. It has grown steadily since then, and is now run by his grandson, Naveed Khawaja, who took over the business following his father's retirement three years ago. From the beginning, the company has specialised in selling high-quality imported cars to affluent customers, both new and second hand. It sells to wealthy individuals, as well as to companies buying cars for the use of their senior management. Ten years ago, LCK also started offering rental of luxury cars, often to the same clients, with an option to buy the car after the rental period if the client particularly liked it.

Over the last few years, the company has struggled to maintain its growth. Customers are increasingly buying luxury cars online directly from the US and Japan. Also, cars are increasingly being listed for sale in online marketplaces, which makes it easier for small dealers to reach potential buyers. LCK refuses to list its cars on these third-party marketplaces because it wishes to retain control over how they are displayed, although it does list its stock on its own website, which also provides a facility for potential customers to obtain further details about the cars, or register their current vehicle details for a provisional trade-in quote. Purchases of cars can only be made in person, as LCK considers personal interaction and service to be a key aspect of its brand. Apart from the website, LCK advertises in a number of local newspapers but otherwise does not undertake any formal marketing and has never had a marketing strategy. LCK has many long-term personal and corporate customers and has always relied on word of mouth to gain new business.

An extract from LCK's website is given in Appendix 1.

Naveed is keen to consider what a marketing strategy would look like, so he can decide whether to invest in marketing further. He recently met a digital marketing consultant at a networking event, who has sent a follow-up email (Appendix 2). Naveed would like to consider the advantages and disadvantages of launching a major digital marketing initiative (including any potential ethical issues it may raise).

**Requirements**

(a) Discuss the factors which LCK would need to consider in developing a marketing strategy. **(08 marks)**

(b) Evaluate the commercial advantages and disadvantages of the proposed digital marketing initiative. **(10 marks)**

(c) Discuss the ethical issues that may be raised by the marketing strategy and proposed digital marketing initiative, and recommend safeguards the business should put in place. **(07 marks)**

**Total: 25 marks**

**APPENDIX 1 – EXTRACT FROM WEBSITE OF LUXURY CARS KARACHI – ABOUT US**

Luxury Cars Karachi was founded in the 1960s by Mohammed Khawaja, whose vision was to supply high-quality cars to discerning clients, and his aim was to be the most trusted firm to deal with. He always took the time to understand his clients and their needs, and to ensure that they were supplied with a car they would be delighted with.

These values have been maintained ever since and we continue to earn the trust of corporate and personal clients. We are very proud that many of our clients have been buying cars from us for decades including the elite of society and Pakistan's most prestigious businesses. We pride ourselves on offering a personal service to every one of them.

## APPENDIX 2 – EMAIL FROM LIQUID DIGITAL

To: Naveed Khawaja, Luxury Cars Karachi
From: Farrokh Kashani, Liquid Digital

Dear Naveed,

It was great to meet you last week and find out more about your business. The reputation and success you have created is very impressive!

As discussed, we are experts in digital marketing and I am convinced we can help you make your business even more successful by applying modern techniques. Services we offer that you might be interested in include:

- Redesigning your website using the latest search engine optimisation (SEO) and mobile optimisation techniques
- Developing a dedicated app for customers to access information, make purchases and communicate with you
- Social media campaigns
- Email and SMS marketing
- Analytics and reporting
- Digital content – blogging, vlogging and visuals

I would be delighted to have a follow-up conversation with you to discuss this further and understand how we can best support you. Please let me know when would be a good time to meet.

Regards

Farrokh

**(THE END)**