The Institute of
Chartered Accountants
of Pakistan

Multi Subject Assessment Stage

5 June 2018
3 hours and 30 minutes – 100 marks
Additional reading time – 15 minutes

Strategic Management – Professional Competence

CENTRALISED REGISTRATION NUMBER (CRN)

INSTRUCTIONS

Read the instructions carefully before answering the questions:

1. Answer all **THREE** questions.
2. Write your Name and Roll Number on the top perforated portion of the **MAIN ANSWER SCRIPT ONLY.** Do not write your Name, Roll Number 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 script.
4. Answer each question in black pen only.
5. Do not write anything on the question paper except CRN.
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 shall be allowed.
8. Mathematical tables will be supplied on request.

QUESTION 1

XYZ Industries Ltd (XYZ) manufactures, repairs and services equipment for mining companies. Its only factory is in Hyderabad, and all of its sales are made in Pakistan. Its CEO is Farukh Dawar.

Some of the equipment supplied by XYZ is standard across the industry, and can be supplied without any additional customisation. Other items must be manufactured on receipt of specific customer orders, and the manufacturing process can take anywhere between a few days and six weeks for more complex products. While customers usually plan their purchases many months in advance, some orders may be unplanned, for example, when a broken piece of equipment such as a drill or pump has to be replaced at short notice. XYZ also operates a network of depots throughout Pakistan, providing both planned maintenance services and all emergency repairs for the equipment that it sells.

The equipment made by XYZ is generally too heavy to be transported economically by air, so it is normally distributed via road or rail links within Pakistan.

In the year ended 31 December 2017, trading conditions for XYZ were challenging, as mining companies in Pakistan were reluctant to expand their operations or invest in new equipment in a climate of continued economic and political uncertainty. The XYZ board has decided that in order to promote revenue growth, the company needs to expand geographically. Malaysia, where there is significant mining activity, has been identified as a suitable location. A base in Malaysia could supply customers located in Malaysia, and other customers in the south-east Asia region. Two alternative strategies are being proposed:

(i) To establish a subsidiary in Malaysia with its own manufacturing capability (known as 'Strategy 1')
(ii) To establish a division in Malaysia which distributes equipment manufactured in Pakistan (known as 'Strategy 2')

Strategy 1
This would involve setting up a Malaysian subsidiary to manufacture equipment at a new factory, for distribution to customers in Malaysia and south-east Asia by sea. Malaysian Equipment Inc (MEI), would be incorporated in Malaysia where the currency is the Malaysian ringgit (RM). The new factory would be built in Malaysia for an estimated initial cost of RM 195 million. This would be financed partly by an issue of shares, but mainly by debt. The XYZ treasurer recently left the company, but had already identified two alternative methods of debt finance (Appendix 1).

Much of the equipment manufactured by MEI would be similar to that manufactured in Pakistan, but some equipment would be customised to accommodate the different activities of Malaysian and south-east Asian mining industries, and the different commodities that are mined in the region. The capacity of the Malaysian factory would be about one-third of the existing factory in Hyderabad. Skilled staff, supply chains and production facilities would need to be developed.

Components and materials for the new factory would be sourced from Malaysian suppliers. Staff would be recruited locally, and would include engineers responsible for repairs and maintenance of the equipment sold across the region.

Strategy 2
Under this strategy, a distribution centre would be built in Malaysia, at a cost of RM 12.5 million, which could be financed from XYZ's operating cash flows. Standard equipment would continue to be manufactured in Pakistan, and transported to the distribution centre by sea, from where it would be sent to customers in Malaysia and south-east Asia. Made to order items would be sent directly to the customer from Pakistan.

Under Strategy 2, the Malaysian operation would be a division, managed from the Pakistan head office. A group of engineers based in Malaysia (comprising about half the number required for Strategy 1) would be responsible for repairs and maintenance of the equipment sold.

Under either strategy, construction work and other preparation would commence on 1 January 2019, and would then take one year to complete. Trading in Malaysia and south-east Asia would then commence on 1 January 2020. The former treasurer provided summary forecasts of operating profit for both strategies (Appendix 2).

The XYZ board has not yet made a final decision on which of the strategies to adopt, and no information on its intentions, or either of these options, has been made public. No risk assessment of either strategy has been carried out.

You are an accountant reporting to Saira Kundi (FCA), the Chief Financial Officer of XYZ. You have been reviewing the information prepared by the treasurer – the finance methods for Strategy 1 (Appendix 1) and the summary forecasts of operating profit under each strategy (Appendix 2).

You have been asked by Saira Kundi to prepare a draft report for the XYZ board which addresses each of the following segments.

(a) For the two alternative strategies:

(i) Determine the net present value (NPV) in Pakistan rupees at 1 January 2019. **(05 marks)**

(ii) Evaluate and explain the risks of exchange rate fluctuations, including calculations of the sensitivity of the NPV to future exchange rate movements. **(10 marks)**

(iii) With specific reference to the products and services that XYZ offers, evaluate the benefits and risks associated with each strategy, and recommend the preferred strategy to adopt. **(10 marks)**

(b) Compare the two proposed debt finance methods for Strategy 1 and give a recommendation on which method to use. **(10 marks)**

(c) Discuss the income tax implications if XYZ opts for Strategy 2.
Note: Actual calculations are not required. **(08 marks)**

(d) Saira is concerned about some ethical issues for XYZ. She has passed you an email from Farukh Dawar which details a proposed collaboration with AUG Inc, a large Malaysian mining company (Appendix 3). As part of your report, provide notes explaining any ethical issues for XYZ arising from this proposed collaboration and how these should be addressed. **(07 marks)**

Requirement
Prepare the sections of the report requested by Saira Kundi.

Total: 50 marks

APPENDIX 1 – FINANCE METHODS FOR STRATEGY 1, PREPARED BY THE XYZ TREASURER

The XYZ board estimated that the financing needed for Strategy 1 would be RM 195 million. Our initial working assumption is that the exchange rate will be RM 1 = Rs. 25.

The board decided that the level of equity finance for Strategy 1 will amount to RM 25 million, with the remaining RM 170 million needing to be debt financed, using one of the following alternative methods:

Finance Method A
On 1 January 2019, the Malaysian subsidiary, MEI, would raise a 15-year loan of RM 170 million from a Malaysian bank, at an annual fixed interest rate of 5%. XYZ, as the parent company, would provide guarantees to the Malaysian bank for the repayment of the loan.

Finance Method B
On 1 January 2019, XYZ would raise a Rs. 4,250 million, 10-year loan from a Pakistan bank, at an annual fixed interest rate of 4.8%. XYZ would then immediately make a loan to MEI of RM 170 million. This would be a 15-year loan, at an annual fixed interest rate of 5%.

APPENDIX 2 – SUMMARY FORECASTS OF OPERATING PROFIT AND WORKING ASSUMPTIONS

XYZ staff travelled to Malaysia to undertake market research, investigate proposed operations and estimate costs. The following forecasts were then prepared:

Strategy 1
It is anticipated that it would not take long for the reputation of MEI's new factory to become established, so MEI would spend the year 2020 growing its share of the market. The sales figure for the year ending 31 December 2021 would then remain at that level in subsequent years.

Summary forecasts for MEI are as follows for the years ending 31 December

	2020	2021 and onwards
	RM in '000	
Revenue	59,000	93,450
Manufacturing costs:		
Variable production	(13,140)	(19,125)
Fixed production (other than depreciation)	(29,350)	(29,750)
Gross profit	16,510	44,575
Administrative and distribution	(16,815)	(17,100)
Depreciation	(10,000)	(10,200)
Operating (loss)/profit	(10,305)	17,275

Strategy 2
Under this strategy, it is expected that revenues will be lower than for Strategy 1, and will be constant from the year ending 31 December 2020 onwards.

Summary forecasts for the Malaysian division are as follows for the years ending 31 December

	2020 and each year thereafter Rs. in '000	Exchange rate	2020 and each year thereafter RM in '000
Revenue	N/A		28,170
Manufacturing costs:			
Variable production	(290,500)	RM 1 = Rs. 25	(11,620)
Incremental fixed production costs	(75,000)	RM 1 = Rs. 25	(3,000)
Gross profit			13,550
Administrative and distribution costs in Pakistan	(270,000)	RM 1 = Rs. 25	(10,800)
Depreciation	(35,000)	RM 1 = Rs. 25	(1,400)
Operating profit			1,350

Working assumptions

- For both strategies, all construction and other preparation work will commence on 1 January 2019 and all initial cash outlays will be made on that date.
- For both strategies, trading will commence on 1 January 2020.
- The risk-adjusted annual weighted average cost of capital for Strategy 1 is estimated at 10%, and that of Strategy 2 has been estimated at 8%.
- The exchange rate will be constant at RM 1 = Rs. 25.
- For Strategy 1, all costs incurred, and all revenues earned, are in RM.
- For Strategy 2, all operating costs are incurred in Rs. and all revenues are earned in RM.
- Operating cash flows will arise at year ends.
- All cash flows will be remitted to the parent company in Pakistan.
- Ignore tax.

APPENDIX 3 – OFFER OF COLLABORATION FROM AUG INC – EMAIL FROM FARUKH DAWAR TO SAIRA KUNDI

Good morning Saira,

As you know, last week I received an email from AUG Inc in Malaysia, offering to collaborate with XYZ. I include an extract below:

"The AUG board is aware that XYZ is considering opening a new factory in Malaysia, operating through a newly-formed subsidiary, MEI. As you will be aware, AUG is a major mining company, with Malaysia being our main market. We are always interested to hear about new suppliers, and would like to discuss whether MEI could become AUG's preferred equipment supplier for its Malaysian and south-east Asian operations, on terms that we hope can be discussed in the near future. We are sure that a mutually beneficial arrangement could be made, if AUG were to make certain assurances in regard to the amount of business that it could give to MEI. We would welcome a meeting with all members of the XYZ board to take this proposal further."

Saira, I understand that you have today declared a conflict of interest, in that your brother lives in Malaysia and is on the board of AUG. The XYZ board has expressed concern about any ethical issues that may arise from this relationship when we enter into any negotiations with AUG. I would like you to draft some notes for the board addressing these issues that will put their minds at rest.

I look forward to your response,
Farukh Dawar

QUESTION 2

KIT Solutions (KIT) is a listed IT company based in Pakistan which operates through three divisions: Software, Hardware and Training. It sells its products and services to both individual and business customers, but the company has performed poorly in recent years. A significant proportion of KIT's ordinary shares are still held by the private equity firm, PPZ, and pressure from PPZ about the poor share price performance has resulted in the recent appointment of a new Chief Executive, Masood Khan, who has been tasked with improving performance.

KIT's Software division (which sells hundreds of software packages, as well as hundreds of different games) and the Training division (which offers training courses in software applications and general computer use) have performed reasonably well, but both of their divisional heads believe that these two divisions have suffered because most of the company's available funds have been provided to the Hardware division, in an attempt to help it to become established after it was first set up.

The Hardware division was set up with a purpose-built factory in Pakistan to diversify into the manufacture of items such as computer cases, motherboards, central processing units, monitors and disk drives, but it has struggled to compete with established, multi-national suppliers. It has continued to perform below expectations, and KIT's board has agreed to sell the Hardware division on 31 March 2019 for net cash proceeds of Rs. 3,000 million, and withdraw from the hardware market completely. The board is still deciding how to use the net cash proceeds in the longer term.

You are a newly appointed senior accountant at KIT, and you report to the chief financial officer (CFO). With the CFO currently away from the office, you have been asked by Masood Khan to review the forecast information in Appendix 1, along with some notes on alternative uses of the net cash proceeds from the sale of the Hardware division (Appendix 2). Masood Khan has asked you to prepare a draft report which addresses each of the following segments:

(a) (i) Analyse the financial and strategic implications of the KIT board's decision to close the Hardware division, including key ratios. **(09 marks)**

(ii) Explain the likely effects on the risk profile of KIT, and on its share price, of each alternative use of the net cash proceeds from the sale of the Hardware division. **(07 marks)**

(b) Masood Khan has drawn your attention to notes that he made soon after his appointment (Appendix 3). With reference to the Code of Corporate Governance, identify improvements that could be made in the governance structure of KIT. **(04 marks)**

(c) You have also been given an extract from management accounting information related to the Software division (Appendix 4). Identify and justify the additional information that should be made available at divisional management level to assist future decision making for sales and customer management in the Software division. **(05 marks)**

Requirement
Respond to the instructions from Masood Khan.

Total: 25 marks

APPENDIX 1 – FORECAST PERFORMANCE

Forecast performance for the year ending 31 December 2018

	Training	Hardware	Software	Total
	Rs. in million			
Revenue	2,100	690	3,500	6,290
Operating profit	650	95	700	1,445
Interest	100	75	200	375
Profit before tax	550	20	500	1,070
Net assets at carrying amount	3,200	2,650	6,100	11,950
Total assets at carrying amount	5,700	4,200	9,100	19,000
Current liabilities	2,000	1,000	2,000	5,000
Non-current liabilities	500	550	1,000	2,050

If there is no restructuring, the performance of all three divisions in the year ending 31 December 2019 will be the same as that forecast for the year ending 31 December 2018.

APPENDIX 2 – ALTERNATIVES FOR USE OF THE NET CASH PROCEEDS FROM THE SALE OF HARDWARE DIVISION

Alternative 1
Purchase new production equipment for the Software division in order to improve its productivity and product quality. It is estimated that this new investment would generate a 9% annual return.

The cost of new production equipment for the Software division would be Rs. 6,000 million. To finance this amount, KIT would use the net cash proceeds of Rs. 3,000 million from the sale of the Hardware division and borrow a further Rs. 3,000 million.

Alternative 2
Use the whole of the Rs. 3,000 million net cash proceeds from the sale of the Hardware division to reduce some of KIT's existing borrowing.

APPENDIX 3 – GOVERNANCE ARRANGEMENTS AND DATA MANAGEMENT – NOTES PREPARED BY MASOOD KHAN

Governance
The board consists of seven directors, out of which four are executive directors who have each held these posts for over 10 years, and myself. Before I was appointed, the chair also acted as the chief executive. At board level, all major functions are carried out by the main board, with no subcommittees. The internal audit department is headed by Sami Ahmed, a certified Internal Auditor who served the company in various positions prior to his appointment as Head of Internal Audit.

Sales and customer data
All of our customers (whether individual or business customers) order products and training courses online. Both businesses and individual customers can return products to KIT, for any reason at all, within 14 days of purchase. We do not record the reasons for these returns.

There are hundreds of businesses on KIT's customer database, but many of them have not made a purchase for many years. Individual customers are asked to provide details about themselves when they place an order, and this information is held on a database along with the history of the customer's transactions. Little use appears to be made of this information; I have been told that there is far too much detailed data to be useful.

APPENDIX 4 – FINANCIAL AND OPERATING DATA – SOFTWARE DIVISION

Each quarter, the board receives the following summary management accounts and operating data to monitor the performance of the business divisions. The figures below relate to the Software division.

Quarterly summary management accounts for the year ended 31 December 2017

	3 months to 31 March 2017	3 months to 30 June 2017	3 months to 30 Sept 2017	3 months to 31 Dec 2017	Total
	---------------------- Rs. in million ----------------------				
Revenue by customer type:					
Individual customers	420	345	420	605	1,790
Businesses	120	100	120	180	520
Revenue by product type:					
Software packages	365	395	430	460	1,650
Games	175	50	110	325	660
Cost of sales by product type:					
Software packages	270	290	315	335	1,210
Games	110	25	70	205	410

Operating data for the year ended 31 December 2017

	3 months to 31 March 2017	3 months to 30 June 2017	3 months to 30 Sept 2017	3 months to 31 Dec 2017	Total
Number of items sold:					
Software packages	120,000	130,000	140,000	150,000	540,000
Games	50,000	10,000	25,000	75,000	160,000
Number of items returned by all customers	15,500	12,750	16,100	21,955	66,305
Number of different types of product sold	480	380	420	560	-

QUESTION 3

Jazeera Machinery Ltd (JML) sells new and used agricultural machinery (including ploughs, harvesters, forklifts, drills and tractors) through a network of dealerships across Pakistan. It sells equipment acquired from both private sellers and a range of manufacturers, many of whom have enjoyed long trading relationships with JML.

Teela Ltd (Teela) is another company that deals in agricultural equipment, concentrating mainly on fertilising and pest control systems. It has performed poorly in recent years after it diversified unsuccessfully into the sale of tractors under a franchise agreement with a newly established manufacturer. This new brand of tractor has struggled in a market that is dominated by more established brands. With promotional efforts diverted towards tractor sales, Teela's management's attention became fully taken up with the struggling franchise, and it began to miss sales targets for its other products.

Teela's sales and cash flows have been declining in 2018, and it has recently entered into liquidation. The liquidator is attempting to sell Teela as a going concern, and has been in discussion with JML as a potential purchaser. The directors of JML believe that Teela could be a useful acquisition, as some of its dealerships are in valuable locations and JML has been wanting to expand its activities to include other types of equipment.

In 2016, an offer was made to acquire the Teela brand for Rs. 300 million by another agricultural equipment dealer. The offer was given serious consideration at the time but was eventually refused. In 2017, one of the new tractors sold by Teela crashed as a result of steering problems, injuring several farm workers. As a consequence, Teela is being sued for a substantial sum.

It is June 2018. You are the chief accountant at Jazeera Machinery, reporting to the CFO. You have been reading through the notes describing the directors' strategy for Teela (Appendix 1) and Teela's latest forecast financial statements (Appendix 2). The CFO has asked you to send him a memorandum that can be used to report to the board on the proposed Teela acquisition. This memorandum should include the following elements:

(a) A discussion on the valuation of Teela's business assets for the purpose of the acquisition. Discuss any key areas of uncertainty involved in the valuation and indicate any further information that may be required. Based on the available information, determine a plausible amount which JML may quote for acquiring Teela's business. **(11 marks)**

(b) With reference to the forecasts about Teela's future performance in Appendixes 1 and 2, construct a cash flow valuation and discuss the importance of the successful implementation of JML's proposed strategy for Teela. Outline the risks to the proposed strategy that arise with the particular circumstances of this acquisition. **(10 marks)**
Note: Ignore tax

(c) Discuss the impact of income tax if it is taken into consideration while constructing the cash flow valuation in (b) above. **(04 marks)**
Note: Actual calculations are not required.

Requirement
Prepare the memorandum required by the CFO.

Total: 25 marks

APPENDIX 1 – JML'S INTENDED STRATEGY FOR TEELA LTD

Due to the pending litigation, the directors of JML would prefer to acquire the Teela business as a whole, but not to acquire its shares. JML's plan for Teela is to re-launch the business, continue to sell fertilising and pest control equipment and also, if feasible, operate an alternative tractor manufacturer's franchise. Implementing this strategy, it is expected that it will turn Teela's fortunes around.

Forecast annual results under this new strategy, assuming that a new franchise arrangement can be set up successfully, include a 100% increase in revenue in 2019 compared to 2018, with cost of sales increasing accordingly. Administrative and distribution costs are fixed costs, but synergistic savings of Rs. 20 million should be achieved in 2019. From 2019, annual profits are expected to be constant.

The annual depreciation amount will stay constant at the 2018 charge, and annual capital expenditure to sustain the business should be around Rs. 75 million.

JML's cost of capital has been estimated at 10%.

APPENDIX 2 – FORECAST FINANCIAL STATEMENTS FOR TEELA LTD

Statement of profit or loss for the year ended 31 December

	Unaudited forecast 2018	Actual 2017
	--------- Rs. in million ---------	
Revenue	3,519	4,223
Cost of sales (Note 1)	(3,060)	(3,672)
Gross/profit	459	551
Depreciation	(335)	(335)
Administrative and distribution costs (Note 1)	(93)	(93)
Profit from operations	31	123
Finance costs	(138)	(110)
(Loss)/profit for period	(107)	13
Note		
Retained earnings at 1 January	428	415
Retained earnings at 31 December	321	428

Summary statement of financial position at 31 December

	Unaudited forecast 2018	Actual 2017
	--------- Rs. in million ---------	
Assets		
Non-current assets		
Property, plant and equipment (Note 2)	2,480	2,815
Current assets		
Inventories (Note 3)	1,685	1,408
Receivables (Note 4)	75	122
	1,760	1,530
Total assets	4,240	4,345
Equity and liabilities		
Issued capital	765	765
Revaluation reserve	153	153
Retained earnings	321	428
	1,239	1,346
Non-current liabilities – loans	2,234	2,142
Current liabilities	767	857
Total equity and liabilities	4,240	4,345

Notes

1. Cost of sales are 90% variable, with the other 10% being fixed. Administration and distribution costs are all fixed.
2. The estimated fair value of property, plant and equipment at 31 December 2018 is Rs. 3,400 million, of which Rs. 2,300 million relates to property. Selling costs would amount to Rs. 75 million. There have been no acquisitions or disposals of property, plant and equipment during 2018.
3. Inventories at 31 December 2018 consist of Rs. 615 million of tractors, and Rs. 1,070 million of fertilising and pest control equipment. The administrator claims that the total estimated net realisable values (at full retail price) are Rs. 690 million and Rs. 1,300 million respectively at 31 December 2018.
4. Within receivables, there is a large debt that is more than a year old and amounts to Rs. 15 million. The administrator has pressed this customer for payment and has expressed some confidence that it will be paid in a few weeks' time.
5. Teela had recently estimated its annual cost of capital as 10%.

(THE END)