Certificate in Accounting and Finance Stage Examination

The Institute of Chartered Accountants of Pakistan

4 September 2024
3 hours – 100 marks
Additional reading time – 15 minutes

Managerial and Financial Analysis

Instructions to examinees:

(i) Answer all **NINE** questions.
(ii) Answer in **black** pen only.
(iii) Multiple Choice Questions must be answered in answer script only.

Section A

Q.1 Select the most appropriate answer from the options available for each of the following Multiple Choice Questions (MCQs). Each MCQ carries **ONE** mark.

(i) Which of the following is the primary purpose of conducting a resource audit in an organization?

(a) To comply with legal requirements for annual financial audits
(b) To identify and assess all significant resources and their effective utilization
(c) To determine the organization's market position and level of competition
(d) To forecast economic trends and prepare financial statements

(ii) Which of the information systems is specifically designed to improve senior management's decision making by providing continual access to up-to-date information?

(a) Transaction Processing System (b) Management Information System
(c) Decision Support System (d) Executive Information System

(iii) Which of the following is **NOT** a likely consequence of poor law and order situation on businesses?

(a) Increased employee absenteeism (b) Lower security costs
(c) Higher insurance premiums (d) Reduced investment

(iv) Risk management is the process of managing:

(a) downside risks only (b) business risks only
(c) speculative risks only (d) both downside and business risks

(v) Companies arrange credit lines and overdraft facilities to manage:

(a) the credit risk (b) the liquidity risk
(c) the market risk (d) the speculative risk

(vi) Which of the following is **NOT** a characteristic of futures contracts?

(a) They are traded on an exchange
(b) They can be tailored to users' requirements
(c) They are settled on a predetermined date.
(d) They cannot be negotiated 'over-the-counter'

(vii) A company has recently paid a dividend of Rs. 6 per share, which is expected to grow by 9% per annum in the foreseeable future. The shareholders require an annual return of 19% and the next annual dividend will be paid in one year's time. What would be the market value of each share?

(a) Rs. 79.3 (b) Rs. 66.7 (c) Rs. 65.4 (d) Rs. 60.0

(viii) The WACC of a company is 12%, and 50% of its shares are held by the directors. Ignoring taxation, if annual cash profits of the company are Rs. 240 million, the total market value of the company would be:

(a) Rs. 1 billion (b) Rs. 2 billion (c) Rs. 4 billion (d) Rs. 480 million

(ix) A company has an average payment period of 2 months and a payable balance of Rs. 2.5 million. What are the annual credit purchases of the company?

(a) Rs. 30 million (b) Rs. 5 million (c) Rs. 15 million (d) Rs. 10 million

(x) A company with an aggressive working capital policy is likely to:

(a) maintain low levels of raw materials and finished goods
(b) offer extended credit terms to attract more customers
(c) invest heavily in long-term assets to boost profitability
(d) ensure high liquidity by holding large cash reserves

(xi) Which of the following best explains the trade-off between high and low levels of working capital?

(a) High levels of working capital are inexpensive but offer low returns, while low levels reduce cost and increase liquidity
(b) High levels of working capital are costly but ensure operational stability, while low levels reduce costs but increase the risk of financial difficulties
(c) High levels of working capital increase profitability but reduce flexibility, while low levels enhance liquidity but decrease profitability
(d) High levels of working capital reduce the need for external financing, while low levels increase the need for long-term investments

(xii) Which of the following factors is **LEAST** likely to influence the required level of working capital investment in a company?

(a) The length of the working capital cycle
(b) The company's risk management strategy
(c) The industry's standard credit terms and payment practices
(d) The company's long term growth prospects and capital expenditure plans

(xiii) What does the seller do in a Murabaha transaction?

(a) Provides financing to the buyer without disclosing the product cost
(b) Sells a product by mentioning the cost and adding a profit
(c) Sells a product at a fixed price without considering the cost
(d) Engages in a profit-sharing agreement with the buyer

(xiv) When is venture capital most likely to be used?

(a) As a way for small companies to raise debt finance
(b) As an important source of finance for management buy-outs
(c) To manage the day-to-day operations of a company
(d) To fund start-ups exclusively

(xv) How do business angels differ from private equity funds, in terms of their approach to investment?

(a) Business angels usually take control of the companies they invest in, while private equity funds do not.
(b) Business angels do not usually get involved in the management, while private equity funds may appoint directors and take an active role.
(c) Business angels invest in publicly traded companies, while private equity funds focus on private companies.
(d) Business angels require a clear exit route, while private equity funds do not.

Q.2 Elegant Interiors Limited (EIL), a well-established company in the interior design and decor sector with over three decades of experience, operates its head office in Lahore, along with regional offices in Islamabad and Karachi, and outlets in major cities across Pakistan. EIL has adhered to traditional business practices, including the manual distribution of information across its three levels of management, strict office hours and mandatory physical monthly management meetings at the head office. These practices have resulted in inefficiencies, particularly in decision-making, leading to competitive disadvantages.

Required:
Discuss how the implementation of centralized databases, intranet systems, and advanced communication tools could improve decision-making efficiency at EIL. Also, discuss any **two** potential impact that these technological changes could have on the EIL's management hierarchy. **(06)**

Q.3 Aaliyan launched a business selling pre-loved items and hired ten young, uneducated men from his village. He offered them with accommodation, meals, and low wages without formal agreements. The workers accepted the job, unaware of legal wage requirements.

Three years later, a worker's relative from an NGO, informed them about the minimum wage laws. The workers then demanded higher wages and compensation. When Aaliyan threatened to fire them, they sought help from the NGO, which filed a lawsuit against him for violating the wage laws. Aaliyan's lawyer suggested backdating hiring documents and including the value of meals and accommodation to comply with wage law requirements. Aaliyan believes this will resolve the issue.

Required:
Use Tucker's model to analyze the lawyer's suggestion for Aaliyan and recommend solution(s). **(06)**

Q.4 Khalid Masroor (Khalid), an entrepreneur with a strong background in engineering and business, is keen to enter the Electric Vehicle (EV) industry. Although the EV industry is rapidly growing, Khalid is aware of the increasing competition, with established companies leading the industry. To assess the potential of various segments in the EV industry, Khalid, with his risk averse nature, conducts a Porter's Five Forces analysis and constructs the following table:

Segment	Force 1	Force 2	Force 3	Force 4	Force 5
	Threat of new entrants	Threat of substitutes	Bargaining power of suppliers	Bargaining power of buyers	Competitive rivalry
Charging Infrastructure	Low	Low	Low	High	High
Battery Recycling	High	Low	Low	Low	Low
Specialized Commercial EVs	High	High	Low	High	High
Affordable Personal EVs	High	High	High	High	High

Required:
(a) Advise which segment presents the most viable business opportunity for Khalid. Also, provide reasons for your answer. **(03)**
(b) For each force, list **three** factors that influence its strength. Also, explain how each of these factors might have impacted the strength of that particular force in your recommended segment in (a). **(11)**

Q.5 Examples of technological advancements include Blockchain technology, the 5G network, Intel's new generation of Core i7 processors, 3TB USB drive, Windows 11, Social media platforms, and e-Commerce.

Required:
Define disruptive technology and discuss whether each example of technological advancements listed above is disruptive or non-disruptive. **(06)**

Section B

Q.6 Wasi Limited (WL), engaged in the production and sale of a wide range of consumer goods, is scheduled to commence commercial production of its new product, 'Sisool', on 1 October 2024.

In this respect, a cash budget for the nine months ending 30 June 2025 is currently being prepared, and the following information has been gathered:

(i) Sisool's cost per unit is estimated as under:

Direct material – A	2 kg at Rs. 270 per kg (inclusive of normal loss)
Direct material – B	1.5 kg at Rs. 150 per kg (inclusive of normal loss)
Direct labour – Skilled	2 hours at Rs. 500 per hour
Direct labour – Unskilled	3 hours at Rs. 300 per hour
Variable factory overheads	Rs. 200 per direct labour hour
Fixed factory overheads	Rs. 16 million per annum (inclusive of Rs. 2.5 million depreciation)

(ii) Direct material is purchased at the start of every quarter based on budgeted requirement for that quarter. Material A is purchased from supplier ZT Limited, which offers 4-month credit period, and Material B is purchased from Zia Enterprises on advance payment. Normal loss is estimated at 5% of direct materials, 40% of the loss results in solid waste, which will be sold for cash at Rs. 800 per kg.

(iii) WL maintains an average inventory of raw materials and finished goods equivalent to 15 days' consumption/sales of next quarter.

(iv) Sisool will be sold with a mark-up of 20%. Cash sales represents 40% of total sales and attract a 12% discount. 60% of credit customers pay within 2 months from the date of sale, while the remaining customers take an extra month to settle the account.

(v) Production for the first quarter ending 31 December 2024 is budgeted at 28,000 units, while production would be 12,000 units per quarter for the following two years.

(vi) WL has acquired a building on rent for this project at an annual cost of Rs. 5 million, payable in equal monthly instalment at the start of each month.

(vii) All labour and variable factory overheads are paid at the end of the month, while fixed factory overheads are paid in the first week of the next month.

Note: All transactions would occur evenly throughout the period unless otherwise specified. Assume 30 days in a month.

Required:
Compute the budgeted net cash inflows/(outflows) for the nine months ending 30 June 2025.
(A month-wise/quarter-wise working is not required) **(16)**

Q.7 (a) List **four** benefits of having an effective risk management process in place. **(04)**

(b) **Assume that the date today is 1 September 2024**.

Zain Associates (ZA) has been in the beverages business for past many years and recently signed an export agreement with a customer in Germany. The management of ZA is concerned over high volatility in foreign exchange rates. The receipt of EUR 75,000 from that customer is expected on 30 November 2024, and the management is considering to hedge the related foreign exchange risk through the money market.

ZA's bank has quoted the following exchange rates and annual interest rates:

	PKR/EUR	
	Buy	**Sell**
Spot – Current	301.25	303.15
Spot – 30 November 2024 (Estimated)	310.00	312.00

	Deposit%	**Borrow%**
EUR	4.5	6.0
PKR	12.5	18.0

Required:
Determine whether hedging through the money market is beneficial for ZA. **(06)**

Q.8 Azomax Limited (AL) is a company involved in the manufacturing and sale of home appliances. Below are the extracts from its latest annual financial statements:

	Rs. in million
Ordinary share capital (Rs. 100 each)	80
9% Irredeemable preference shares	30
Earnings before tax	150

Additional information:

(i) AL's ordinary shares are currently trading at Rs. 110 each.
(ii) The risk free rate of return is 7% and the average return on market investments is 11%. AL's equity beta is 1.1.
(iii) The applicable tax rate is 35%.

Proposal under consideration:
AL plans to expand its product line by setting-up a new plant in Khushaab for manufacturing refrigerators. The project requires financing of Rs. 100 million for four years. The management is considering the following two financing options:

Option I: Issue 13% bonds of Rs. 100 each at par. Bondholders can either convert their bonds into ordinary shares at a ratio of 1 share for every 2 bonds or redeem them at a 15% premium at the end of the 4th year.

Option II: Issue zero-coupon bonds of Rs. 100 each at a discount of 20%. Bondholders can either convert each bond into 1 ordinary share or redeem them at par at the end of 4th year.

It is expected that either financing option will increase AL's equity beta to 1.2. Additionally, the market value of AL's shares is expected to grow by 5% per annum.

Required:
Using the weighted average cost of capital (WACC), recommend which of the two financing options should AL use for the new plant. **(12)**

Q.9 Zayd Packaging Solutions (ZPS) is planning to setup a new packaging unit to meet the specific requirements of one of its customers and is considering the purchase of a customized machine. In this respect, the following two proposals are under consideration:

	Proposal 1	**Proposal 2**
Purchase cost including import duties	Rs. 15 million	Rs. 11.5 million
Useful life (years)	4	3
Annual production capacity (units)	50,000	35,000
Annual preventive maintenance cost at current prices	Rs. 200,000	Rs. 300,000

Additional information:

(i) Under Proposal 1, the supplier would repurchase the machine for Rs. 2.5 million (at year 4 prices) at the end of its useful life.

(ii) Under Proposal 2, a major overhaul at the end of year 2, costing Rs. 1.5 million (at year 2 prices), would be required. This overhaul would increase the machine's production capacity by 5,000 units from the 3rd year onward and extend its useful life by one year. This machine would be sold in the local market for Rs. 1.5 million (at year 4 prices)

(iii) ZPS anticipates an annual demand of 35,000 units in the first year, with demand increasing by 7% each year. The production capacity of the new machine would be used to meet this demand. If the machine's production capacity falls short, ZPS would need to purchase additional units from the market at Rs. 1,200 per unit (at current prices).

(iv) The variable cost of production at current price is Rs. 700 per unit under Proposal 1 and Rs.750 per unit under Proposal 2.

(v) Depreciation would be calculated using the reducing balance method at a rate of 25%. It is assumed that accounting depreciation matches tax depreciation.

(vi) Inflation rate is estimated at 10% per annum, starting from year 1.

(vii) The applicable tax rate is 35% and is payable in the year in which the liability arises.

(viii) The applicable discount rate is 14%.

(ix) Assume that, unless stated otherwise, all cash flows arise at the end of the year.

Required:
Evaluate both proposals using the net present value method and recommend the best proposal. **(15)**

(THE END)