



## Certificate in Accounting and Finance Stage Examination

3 September 2025

3 hours – 100 marks

Additional reading time – 15 minutes

### Managerial and Financial Analysis

#### **Instructions to examinees:**

- (i) Answer all **EIGHT** 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).

- (i) A traditional taxi service loses 35% of its customers within 18 months after the launch of an app-based ride-hailing competitor. This situation is an example of:
  - (a) Cyclical competition
  - (b) Technological disruption
  - (c) Regulatory failure
  - (d) Price war

**(01)**
- (ii) A food delivery platform experiences unexpected losses after a provincial government mandates formal employment contracts for all riders, effectively prohibiting freelance delivery work. Under PESTEL, this is best categorized as:
  - (a) Environmental policy
  - (b) Political intervention
  - (c) Social pressure
  - (d) Technological limitation

**(01)**
- (iii) Which of the following is an example of a preventive control that reduces the risk of unauthorized access?
  - (a) Daily reconciliation
  - (b) Firewall restrictions
  - (c) Intrusion log reports
  - (d) Transaction audit trail

**(01)**
- (iv) A logistics firm deployed a new enterprise information system integrating warehouse, inventory, and delivery tracking. However, regional branches continue using legacy spreadsheets for reporting, leading to data discrepancies between operational records and executive dashboards.

Which of the following best explains the primary Information and Communication Technologies (ICT) failure in this scenario?

  - (a) Inadequate encryption protocols during data transmission
  - (b) Lack of user access controls in the new system
  - (c) Poor ICT governance leading to non-standardized data practices
  - (d) Overinvestment in communication hardware without cloud backup

**(01)**
- (v) Under the AAA model, what should an accountant do first when asked to backdate an invoice to meet a sales target?
  - (a) Consider alternative courses of action
  - (b) Identify the stakeholders involved
  - (c) Recognize that an ethical issue exists
  - (d) Make a decision and act on it

**(01)**
- (vi) A system that provides in-depth information, advice and recommendations on matters related to a specific field is known as:
  - (a) Expert System
  - (b) Decision Support System
  - (c) Enterprise Resource Planning
  - (d) Executive Information System

**(01)**

- (vii) Lenders analyse a company's financial statements primarily to help them:
- (a) assess the risk and creditworthiness of financing the company
  - (b) provide a record of the company's historical profitability
  - (c) outline the company's future growth plans and investment projects
  - (d) show how efficiently the company manages its operations
- (01)
- (viii) Which of the following statements is **NOT** correct about an interest rate option for the option buyer?
- (a) An interest rate option grants the buyer the right, but not the obligation, to deal at an agreed interest rate at a future maturity date
  - (b) A call option is the right to receive interest at the specified rate, guaranteeing a maximum rate of interest
  - (c) A put option is the right to pay interest at the specified rate, guaranteeing a minimum rate of interest
  - (d) A call option is the right to pay interest at the specified rate, guaranteeing a minimum rate of interest
- (01)
- (ix) How can a company with a lower credit rating obtain financing at a rate similar to that of a higher rated company?
- (a) By issuing corporate bonds directly to the market
  - (b) By securing financing through asset securitization of its AA-rated receivables
  - (c) By taking on bank loans at floating interest rates, instead of fixed rates
  - (d) By increasing dividend pay-outs to attract more investors
- (01)
- (x) Which of the following statements is the most appropriate regarding risk management?
- (a) Both pure and speculative risks can usually be insured
  - (b) Pure risks are often managed through internal controls or insurance, while speculative risks must be accepted as part of profit-making
  - (c) Speculative risks can be avoided through better forecasting, while pure risks cannot be avoided
  - (d) Speculative risks only arise in financial markets, whereas pure risks exist only in operational areas
- (01)
- (xi) Consider the following statements:
- (I) A floating charge prevents the borrower from selling inventory in the normal course of business.
  - (II) A fixed charge is typically attached to non-current assets.
  - (III) A fixed charge provides the lender with stronger protection than a floating charge.
- Which of the above statements is/are **NOT** correct with respect to fixed and floating charges?
- |                    |                     |
|--------------------|---------------------|
| (a) I only         | (b) II only         |
| (c) I and III only | (d) II and III only |
- (1.5)
- (xii) Consider the following statements:
- (I) The payroll application automatically flags duplicate entries.
  - (II) Employees retain system access for six months after leaving the entity because user IDs are not deactivated.
  - (III) Access to the financial reporting system requires both a password and a second-factor token.
- Which of the above statements most clearly illustrates a weakness in general IT controls that could undermine the effectiveness of application controls in a financial reporting system?
- |                    |                   |
|--------------------|-------------------|
| (a) I and III only | (b) II only       |
| (c) III only       | (d) I and II only |
- (1.5)

(xiii) A company reports the following information for the year (assume 360 days):

	Rs. in million		Rs. in million
Annual credit sales	720	Average debtors	90
Cost of sales	360	Average inventory	60
Annual credit purchases	300	Average creditors	30

What is the company's Cash Operating Cycle?

- (a) 21 days                      (b) 51 days                      (c) 69 days                      (d) 141 days                      **(02)**

**Q.2** CleanAir Motors (CM), a local electric vehicle (EV) manufacturer in Pakistan, has built its business around assembling affordable urban e-scooters using imported battery packs and locally manufactured frames. In its earlier years, CM's survival depended on access to government grants and low-interest green financing, as well as its ability to meet minimum vehicle safety standards.

Recently, CM has invested in a proprietary battery thermal control system that extends battery life in hot climates, a technology that no local competitor currently offers. Its in-house engineering team has also developed a fast-charging algorithm that integrates with standard 220V outlets, allowing users to fully charge e-scooters at home in just one hour.

As competition heats up with new entrants offering stylish but less efficient EVs, CM's management is evaluating its strategic strengths and considering whether to license its battery control technology to other manufacturers or retain it as an exclusive advantage.

**Required:**

- (a) For CM, explain and identify:
- (i) threshold resources and unique resources
  - (ii) threshold competencies and core competencies **(08)**
- (b) Briefly explain the characteristics of sustainable core competencies and relate these characteristics to the core competencies identified in (a)(ii) above. **(02)**
- (c) Advise CM on whether it should license its proprietary battery technology to competitors to earn additional profit. Justify your recommendation. **(02)**

**Q.3** MediScan Labs, a diagnostics technology company, has developed an AI-based software tool that pre-screens X-rays and flags potentially cancerous cases. The tool has undergone rigorous validation and is certified in both the European Union and Pakistan, demonstrating a proven accuracy rate of 92%.

MediScan plans to deploy the tool in rural hospitals across Pakistan as soon as possible. The rollout plan includes training paramedical staff to operate the tool and provide patient counselling.

MediScan has arranged operational training for staff, believing that no further instruction is needed since the results are 'easy to understand'. The company is concerned that offering additional training such as patient communication, error handling, etc. would delay the rollout plan.

**Required:**

Using the Tucker 5-Question Model, analyse the above situation and advise whether MediScan should proceed with the rollout as planned. **(06)**

- Q.4 AxisSound, a mid-range consumer electronics company, launched its wireless earbuds, AxisPods, three years ago. Initially, the product struggled to gain market share in a crowded segment, with only limited sales. However, it eventually gained traction following the introduction of influencer marketing campaigns and product roadshows. Recently, sales have gone down, as most tech influencers have shifted to newer brands offering active noise cancellation and integrated AI features.

**Required:**

- (a) Identify and explain the stages of the product lifecycle demonstrated in the above situation. (03)
- (b) For each stage identified in (a), highlight **two** relevant costs incurred and recommend an appropriate marketing strategy. (07)

**Section B**

- Q.5 TrendTote (TT) is an online retailer of branded handbags, selling exclusively through its e-commerce website. Orders are shipped to Karachi, Lahore and Islamabad via a courier company. The following information is available in this respect:

- (i) The modes of payment and their respective share of total sales are as follows:

Payment Method	% of Sales
Cash on delivery (COD)	40%
Credit card	60%

- (ii) 20% of credit card sales are high-value items requiring customization. These are dispatched 10 days after payment. All other items are dispatched immediately and are delivered the same day.
- (iii) Month wise details of sales value and sales orders are as follows:

Month	Sales value (Rs.)	No. of sales order
August 2025 – Actual	4,800,000	410
September 2025 – Projected	5,200,000	420
October 2025 – Projected	5,600,000	450
November 2025 – Projected	5,100,000	460
December 2025 – Projected	6,200,000	500

- (iv) The courier service charges Rs. 350 per order.
- (v) COD amounts collected by the courier are remitted 5 days after delivery. However, courier charges are deducted on monthly basis from the first payment due in the following month.
- (vi) Credit card payments are credited by the bank 5 days after the sale.
- (vii) All handbags are sold at cost plus 25%.
- (viii) High-value items are purchased upon receipt of orders. Inventory of regular handbags is maintained at 30% of the next month's projected sales. 45% of the purchases are paid in the same month, while the balance are paid in the following month.
- (ix) Annual selling and administrative expenses amount to Rs. 8.6 million, including Rs. 0.9 million in depreciation. These expenses are paid in the same month in which they are incurred.
- (x) The cash and bank balance on 31 August 2025 was Rs. 1,250,000.
- (xi) Purchases of handbags in August 2025 amounted to Rs. 3,600,000.
- (xii) Sales and purchases occur evenly throughout the month unless stated otherwise.
- (xiii) It can be assumed that high value orders numbers are 10% of the total order numbers. All high value orders in August 2025 were delivered in the same month.

**Required:**

Prepare a cash budget for TT for the quarter ending 30 November 2025.

(15)

- Notes:**
- *Month-wise break-down is not required.*
  - *Assume 30 days per month for calculation purposes.*

Q.6 Al-Meezan Textile Ltd. (AMTL), a Pakistan-based exporter and importer of premium fabrics and accessories, is exposed to fluctuations in the exchange rate of Euro (EUR) due to its foreign currency receivables and payables. The details of company's exposures are as follows:

- Receivable: EUR 300,000 due in 3 months from a European customer
- Payable: EUR 500,000 due in 6 months to a European supplier

To manage this currency risk, the treasury department has gathered the following market data:

**Interest Rates (Annualized)**

	EUR	PKR
Deposit	3.80%	9.25%
Borrow	4.80%	11.75%

**Current and Forecasted Exchange Rates (PKR/EUR)**

Period	Bid	Ask
Current spot	321.00	322.00
Expected 3-month spot	327.00	328.25
Expected 6-month spot	330.00	331.50

**Required:**

Construct money market hedge for each of the foreign currency exposures separately and determine their effective exchange rates. Recommend whether each hedge would be beneficial for AMTL.

(12)

Q.7 Maqbool Limited (ML) is a listed consumer goods company. ML's capital structure, based on the financial statements as at 31 August 2025, is as follows:

Source	Rs. in million
Ordinary share capital (Rs. 10 each)	3,000
10% convertible bonds (Rs. 100 each)	2,000

**Additional information:**

(i) ML's market price as at 31 August for the last three years is as follows:

	2023	2024	2025
Price per share (Rs.)	48	52	60

The 2025 price is cum-dividend. A dividend of Rs. 4 per share has been announced and is payable shortly.

- (ii) ML's equity beta is 1.13, the risk-free rate is 10% and the market risk premium is 8%.
- (iii) The convertible bonds are either redeemable at par or convertible into 1.5 shares per bond in four years. The bonds are currently trading at Rs. 94. ML's share price is expected to grow in line with historical trends.
- (iv) The applicable tax rate is 35%.

**New investment**

ML plans to expand into the ready-to-eat food segment, requiring financing of Rs. 2,000 million. ML's management is considering following two alternative financing strategies:

- **Option A: Convertible Bonds Issue**  
Issue new convertible bonds at par for Rs. 2,000 million. The coupon rate will be 200 basis points higher than the existing bonds' rate, to cover the additional gearing risks. All other bond features, i.e., convertibility, par value and four-year term, will be identical to the current bonds.
- **Option B: Right Issue**  
Raise the required funds through a right issue at a premium of Rs. 40 per share. Market analysts caution that such an issue may signal financial weakness, leading to a rise in ML's existing equity beta by approximately 15%.

**Required:**

- (a) Compute ML's weighted average cost of capital (WACC) of the existing business. (07)
- (b) Recommend which of the two financing options should ML prefer for the new investment. (*Show necessary computations*) (06)

Q.8 Alpha Tools Limited (ATL), a mid-sized manufacturer of power tools, is evaluating two mutually exclusive investment projects intended to enhance long-term profitability. Both projects require an initial investment of Rs. 10 million. However, due to capital constraints, ATL can only select one of these projects.

**Project A: Automation Upgrade**

This project focuses on modernizing ATL's production system for a tool model T21 through advanced automation technology. Implementation will take one year, after which cost efficiencies will begin. The following information is available in respect of this projects:

- (i) At present, ATL produces 100,000 units per year, with expected growth of 10% annually.
- (ii) The current variable cost is Rs. 180 per unit, which is expected to increase by 5% annually. After implementation, this variable cost would reduce by 25%.
- (iii) In addition to savings in variable costs, the project would reduce ATL's working capital needs by Rs. 1.5 million (at current prices) due to streamlined operations, available immediately after implementation.
- (iv) The annual recurring maintenance cost of the system would be Rs. 0.5 million (at current prices).
- (v) The project would operate for four years after implementation, with no residual value at the end of its life. Tax depreciation will be calculated using the reducing balance method, with 50% applied in the first year and 25% per year thereafter.
- (vi) For this project, ATL plans to repurpose an existing warehouse, which would otherwise be available for rental at Rs. 0.8 million (at current prices) per year.

**Project B: Market Expansion Initiative**

This growth-driven initiative aims to increase ATL's market share and sales volume of a power tool model K44. The following additional information is available regarding this project:

- (i) Rs. 5 million would be used to purchase new equipment with a useful life of five years, while the remaining Rs. 5 million would fund a comprehensive marketing and advertising campaign.
- (ii) ATL currently sells 200,000 units per year, which is expected to increase by 5%. After implementation, sales units are projected to increase at a rate of 17% annually.
- (iii) The current and post implementation contribution margin is Rs. 80 per unit (at current prices). It is projected to increase by 7% per year.
- (iv) To support ongoing market visibility, ATL would also incur a recurring annual marketing expense of Rs. 1 million (at current prices).
- (v) This initiative will also require an additional working capital of Rs. 0.75 million (at current prices) per annum, out of which 75% will be released at the end of the project.
- (vi) Tax depreciation will be calculated using the reducing balance method at 25% and the depreciable assets will have a salvage value of 20% of its original cost.

**Additional information:**

ATL uses a discount rate of 12% for capital budgeting decisions and applies a corporate tax rate of 30%. Tax is payable in the year in which the liability arises. Unless explicitly stated otherwise, the general rate of inflation is assumed to be 9% per year. All cash flows are assumed to occur at the end of each year unless specified otherwise.

**Required:**

Using the net present value method, recommend which project ATL should undertake. (17)

(THE END)