ICAP

The Institute of Chartered Accountants of Pakistan

Certificate in Accounting and Finance Stage Examination

5 March 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). Each MCQ carries **ONE** mark.

(i) Which of the following best exemplifies the concept of disruptive technology?

(a) A company upgrades from landline telephones to smartphones to enhance communication efficiency
(b) An online retailer uses blockchain technology to execute peer-to-peer transactions, eliminate intermediaries and reduce costs
(c) A business expands its social media presence to complement its traditional marketing strategies
(d) A multinational corporation introduces energy-efficient appliances to comply with environmental regulations

(ii) Which of the following best defines the 'Question Mark' category in the BCG Matrix?

(a) Products with a high market share in a high-growth market
(b) Products with a low market share in a high-growth market
(c) Products with a low market share in a low-growth market
(d) Products with a high market share in a low-growth market

(iii) Which of the following is **NOT** a benefit of life cycle costing?

(a) Assessing the potential profitability of products before incurring major development costs
(b) Shortening the research and development phase to accelerate the product launch
(c) Enhancing estimating techniques and applying lessons from actual performance to future products
(d) Ensuring higher profits by preventing competitors from entering the market

(iv) Which of the following is **NOT** an example of outsourcing?

(a) A company hires an external accountancy firm to manage payroll and employee salaries
(b) A company contracts a building services firm for office cleaning and security
(c) A company sources all its raw materials from various suppliers for manufacturing of its products
(d) A company gives the task of supporting its IT systems to a specialist IT firm

(v) Entity A has an equity beta of 0.9 and a tax rate of 29%. If the risk-free rate is 10% and the average market return is 15%, what is the cost of equity for Entity A?

(a) 11.31% (b) 13.20% (c) 14.50% (d) 15.00%

(vi) Which of the following statements is/are correct?

(I) IT Standards are a form of general control within IT that help to reduce the risk of system weaknesses and processing errors for entities that apply these Standards.

(II) Application controls are applied to all IT systems, particularly in the development, security and use of computer programs.

(a) Only (I) is correct
(b) Only (II) is correct
(c) Both are correct
(d) None is correct

(vii) Which of the following is a key characteristic of financing obtained through preference shares?

(a) Preference shareholders must have voting rights
(b) Dividends on preference shares must be paid even in years of losses
(c) Preference shares rank higher than common equity in liquidation
(d) Preference shares guarantees fixed returns like bonds

(viii) Which of the following financing methods is most suitable for a company experiencing irregular cash flows and seasonal demand?

(a) Long-term debt
(b) Trade credit and bank overdrafts
(c) Retained earnings
(d) Equity financing

(ix) How could a company's heavy reliance on debt financing influence investor perception?

(a) Investors may view it as a sign of strong growth potential
(b) It could raise concerns about financial stability despite potential tax benefits
(c) Equity investors may gain confidence due to higher leverage
(d) It primarily impacts internal financial management rather than investor sentiment

(x) A company is considering issuing bonus shares to enhance the marketability of shares and attract investors. Which of the following is **NOT** a result of a bonus issue?

(a) The company's total share capital increases without an actual cash inflow
(b) The company's earnings per share will likely decrease as the number of shares increases
(c) The shareholders' wealth increases proportionally as the number of shares increase
(d) The market price of the shares may decrease proportionally due to the increase in the number of shares

(xi) Which of the following best distinguishes a commodity futures contract from a commodity forward contract?

(a) Futures are traded over-the-counter, while forwards are exchange-traded
(b) Futures settle only at maturity, while forwards involve daily settlement
(c) Futures have standardized contract sizes, while forwards allow flexibility in quantity
(d) Futures contracts are primarily used for physical delivery, while forwards are mostly used for speculation

(xii) If a company fails to monitor its working capital ratios, which of the following is the **LEAST** likely consequence?

(a) It may struggle to pay suppliers on time
(b) It might have excess cash sitting idle
(c) It's short-term liquidity risk will increase
(d) It will experience a sudden increase in operational costs

(xiii) In Tucker's five-question model, the question 'Is it fair?' primarily considers:

(a) Personal values
(b) Social values
(c) Market values
(d) Legal values

(xiv) A non-profit organization (NPO) receives inconsistent donations each year. The budgeting committee is struggling to set financial targets due to unpredictable revenue. Which budgeting issue is most relevant in this situation?

(a) The NPO has not implemented rolling budgets to adjust for fluctuating revenues
(b) The NPO lacks a proper variance analysis framework to track financial unpredictability
(c) Dependence on external funding sources makes financial forecasting complex
(d) The budgeting process does not include zero-based budgeting to reassess priorities annually

(xv) Which of the following scenarios best exemplifies a situation where the threat of substitutes is the most significant force affecting industry profitability in Porter's Five Forces model?

(a) A high-end fashion brand faces new competitors producing similar luxury items at lower prices
(b) A smart phone manufacturer negotiates better supply chain contracts to reduce component costs
(c) A steel manufacturer experiences rising raw material costs due to a monopoly supplier controlling iron ore distribution
(d) A traditional taxi company struggles as customers increasingly prefer ride-hailing apps due to convenience and lower fares

Q.2 Kurrency Kings (KK), a mid-sized industrial undertaking in Pakistan, recently encountered significant IT challenges. A hacker was able to exploit weak employee passwords to access sensitive production data. Additionally, during a heavy monsoon season, the server room in KK's Karachi office was flooded due to water rushing in from streets, resulting in data loss and service disruption. Despite having firewalls and anti-virus software, the frequency of employees clicking on phishing emails has led to virus infiltrations within the system.

The IT manager at KK has proposed the following controls for approval to the CEO:

- Encrypting all data transmissions within the KK's internal network.
- Enforcing strong passwords policies with mandatory changes every 90 days.
- Relocating servers to an elevated floor and installing shatterproof glass in the server room.
- Implementing surveillance cameras in the server room.
- Disabling USB ports and CD drives on all employee computers.
- Conducting regular IT security awareness training to prevent phishing attacks.

Required:
Determine which controls, proposed by the IT Manager, are most critical for addressing KK's current challenges and which may be less relevant. Provide reasons for your answer. **(06)**

Q.3 GreenGrove Organics Inc. (GG), a global leader in palm oil production, claims to prioritize sustainability and social responsibility. However, an investigative report reveals issues such as deforestation, habitat destruction, and forced relocation of indigenous communities due to GG's operations. Indigenous communities have lost access to vital resources, including clean water, food, and medicinal plants. GG has also been accused of suppressing dissent through legal intimidation and manipulation.

Sadaf Kanwal, who was recently hired as an Assistant Internal Auditor on six-month probation, has been tasked with verifying GG's sustainable palm oil sourcing. During her verification, she uncovered discrepancies in sustainability certifications and no evidence of conservation efforts. When raising these concerns, the CFO dismisses them by saying, "Oh, these are just the company's standard practices. Don't worry about them! However, seeing your dedication to work, I will surely recommend a salary measure upon the successful completion of your probation period."

Required:
Apply the seven-step decision-making process, as outlined in the American Accounting Association (AAA) model, addressing ethical concerns. **(10)**

Q.4 AutoPro, a leader in eco-friendly automobile manufacturing since 2001, has transitioned from fuel-efficient gasoline cars to hybrids and electric vehicles (EV) to address environmental concerns. The government of Takistan supports this shift by offering 5-year tax breaks for investments exceeding USD 20 million and enforcing strict safety regulations. The EV industry is growing fast, with innovations like ABB's Terra 360 chargers and enhanced security through blockchain technology. However, challenges such as political instability, economic issues, and disruptions in lithium imports from Saziland pose significant hurdles, particularly in price-sensitive markets like Takistan. Despite these challenges, global EV demand persists, driven by environmental concerns.

AutoPro's advanced battery technology enhances range and efficiency, yet Takistan's inadequate charging infrastructure contributes to consumer 'range anxiety'. The high cost of setting up fast-charging stations and dependency on a single vendor for supplying critical battery components are other barriers. On the positive side, a 30% rise in global gasoline prices in 2024 is pushing more people toward EVs. Furthermore, Takistan's Health and Environment Committee is also working on stricter laws and fines to improve EV safety and reduce pollution. Millennials in Takistan are strong supporters of EVs, with 72% preferring them over traditional cars. This perfectly aligns with AutoPro's mission to focus on sustainability, innovation, and compliance with safety and emissions standards.

Required:

(a) Perform a PESTEL analysis of AutoPro's operations in Takistan's automotive industry. **(07)**

(b) Conduct a SWOT analysis for AutoPro based on the information provided. **(06)**

(c) Explain how a built-in app in AutoPro's cars that displays real-time charging station locations and availability could benefit AutoPro. **(02)**

Section B

Q.5 (a) A corporate treasury plans to invest Rs. 50 million in a 6-month fixed deposit starting in three months. To guard against unfavorable movements in interest rates, it has secured a lender's option with a strike rate of 19.5% on the notional amount. The option expires in three months. The treasury paid an upfront premium of Rs. 250,000, and an additional transaction cost of Rs. 75,000 applies if the option is exercised.

The current and projected KIBOR rates are as follows:

	3-month KIBOR rate	**6-month KIBOR rate**
Current	18.4%	19.8%
Projected	18.7%	18.9%

Required:

Determine whether the option should be exercised. Also, calculate the net effective interest rate. **(05)**

(b) Assume that the date today is **1 March 2025**.

On 1 March 2025, Tech Solutions (TS), a Pakistani technology company, has signed an agreement with a German software provider to purchase an AI-powered medical diagnostic system. The payment of EUR 4 million is due on 30 June 2025. To hedge against exchange rate fluctuations, TS is considering a currency option. Each option covers EUR 0.4 million.

The current spot exchange rate is EUR 1 = PKR 290. The following June options are available, each with a premium of PKR 0.6 million per option:

- Call option with a strike price of PKR 295.
- Put option with a strike price of PKR 298.

TS predicts that the spot rate in June could range between PKR 296 and PKR 300 per EUR.

Required:

Determine whether the option should be purchased. ***(Show all necessary computations)*** **(05)**

Q.6 The functional currency of Zaristan is ZR.

Great Future Enterprise (GFE) is evaluating a solar farm project that will sell electricity to the national grid. With the government support through subsidies and incentives, GFE aims to strengthen its position in the renewable energy sector while assessing the project's financial feasibility. The following information has been gathered in respect of the solar farm project:

(i) The project requires an initial investment of ZR 200 million, with ZR 150 million allocated for solar panels and ZR 50 million for other infrastructure.
(ii) The solar farm is expected to produce and sell 8,000 MWh in the first year, with an anticipated annual efficiency decline by 2% due to general panel degradation. To counteract, GFE plans to invest an additional ZR 25 million at the start of the fourth year to restore the efficiency back to 8,000 MWh.
(iii) The solar panels will have a useful life beyond the project's duration. At the end of Year 5, their residual value will be 50% of their initial cost, while all other equipment will have zero residual value.
(iv) Electricity will be sold at ZR 10,000 per MWh, with prices increasing by 8% annually.
(v) The annual operations and maintenance cost is estimated at ZR 20 million, increasing by 6% annually.
(vi) Depreciation will be charged at 40% per annum using the reducing balance method for tax purposes.
(vii) An initial working capital investment of ZR 30 million is required, and 80% of it will be recovered at the end of Year 5.
(viii) ZR 10 million was spent on feasibility studies and site surveys last year. Additionally, a permit fee of ZR 5 million must be paid immediately to the government.
(ix) The project will earn 1 carbon credit per MWh, which can be sold at ZR 2,000 per credit. Carbon credit prices are likely to increase by 5% annually.
(x) GFE qualifies for a government subsidy of ZR 50 million, to be received after one full year of successful operation.
(xi) This project qualifies for a two-year tax holiday, after which a standard tax rate of 30% applies. Taxes are payable in the year they arise, and tax losses cannot be carried forward.
(xii) GFE's cost of capital is 18%.

Required:
Using the net present value method, evaluate whether GFE should proceed with the solar project. Assume all cash flows occur at year-end unless stated otherwise. **(15)**

Q.7 XYZ Limited (XYZ) is engaged in the manufacturing of motor cycles. The following information has been extracted from the financial statements of XYZ as of 31 December 2024:

	Rs. in million
Ordinary share capital (Rs. 10 each)	100
20% Irredeemable preference shares (Rs. 100 each)	20
10% Bank loan	20

Additional information:

(i) The details of the dividends in the last four years are as follows:

Year	2021	2022	2023	2024
Dividend per share	Rs. 6.0	Rs. 6.5	Rs. 7.0	*Rs. 8.0

**declared but not paid, due very shortly*

(ii) XYZ's ordinary share price is quoted at Rs. 104 (cum dividend) per share and is expected to grow at 5% per annum.
(iii) The preference share price is quoted at Rs. 200 per share.
(iv) The applicable tax rate is 30%.
(v) XYZ's current equity beta is 1.2.

New investment
XYZ plans to setup an assembly unit for electric motorcycles. The estimated project cost is Rs. 50 million, which will be financed through 12% convertible debentures (Rs. 100 each). Debenture holders will have the right to either convert each bond into one ordinary share or redeem it at a premium of 10% above par value of the bond, at the end of the third year.

Required:
(a) Compute XYZ's weighted average cost of capital (WACC) for the existing business. **(07)**
(b) Calculate the impact of the new investment on XYZ's WACC. **(07)**

Q.8 WildWave Resorts Limited has recently constructed a fully equipped theme park, including an adventure park named WildLand and a water park named WaveLand, at a cost of Rs. 2.2 billion, including capital expenditures of Rs. 2.0 billion. It also features a theatre for live shows, known as WildWave Arena. The following information and projections are provided for the first year of operations:

Theme Park (WaveLand and WildLand)
The standard ticket price for the theme park is Rs. 2,000 per person, while a VIP ticket (which includes a Fast Pass) costs Rs. 3,000 per person. It is estimated that 20% of visitors will opt for the VIP ticket. Tickets for WaveLand and WildLand must be purchased separately.

WildLand is expected to receive approximately 20,000 visitors per month. However, it will remain closed for maintenance in March and September. WaveLand is expected to attract 30,000 visitors per month from March to November but will remain closed during winter.

Visitors are likely to come in groups, such as families or friends, with an average group size of four people. Moreover, the estimated average spending on food and beverages per group is Rs. 5,000.

Theatre (WildWave Arena)
The theatre charges Rs. 500 for a standard ticket and Rs. 1,000 for a VIP ticket. It has a seating capacity of 500, with 100 seats reserved for VIP ticketholders. Each new theatre show will run for five weeks, with an expected occupancy rate of 70% for standard seats and 50% for VIP seats. On weekdays, there will be two shows per day, while on weekends (Saturday and Sunday), three shows per day will be scheduled. The theatre will operate for 40 weeks per year, after taking into account closures during Ramadan, Muharram, and maintenance periods.

The average spending per theatre visitor on food and beverages is expected to be Rs. 300.

Additional information:

Revenue-related information
Approximately 35% of all visitors to WildWave Resorts, including those attending the theatre, are expected to purchase merchandise such as souvenirs, T-shirts, and toys, with an average spending of Rs. 1,000 per visitor.

Cost-related information
The direct cost of food and beverages is estimated to be 50% of the related revenue, while the cost of merchandise is projected at 60% of the related revenue. The production cost of each new theatre show, which includes related salaries, utilities and other expenses, is estimated at Rs. 4 million. Operating costs, including salaries, utilities, maintenance, and other expenses, are estimated at Rs. 520 million for the first year. The marketing and advertising budget for the first year is projected at Rs. 30 million.

The resort is funded equally by debt and equity, with the debt portion carrying an interest rate of 15% per annum. All assets will be depreciated at a rate of 20% per annum using the reducing balance method. Profits will be subject to a 30% tax rate.

Required:
Prepare the budgeted profit and loss account for the first year ending 28 February 2026. **(15)**

(THE END)