Certificate in Accounting and Finance Stage Examination

The Institute of Chartered Accountants of Pakistan

Model paper
3 hours – 100 marks
Additional reading time – 15 minutes

Managerial and Financial Analysis

Instructions to examinees:

(i) Answer all **TEN** questions.
(ii) Answer in **black** pen only.

Section A

Q.1 Select the most appropriate answer from the options available for each of the following Multiple Choice Questions.

(i) Best Cook Limited (BCL) is engaged in processed frozen food (food) production. The market for food is highly competitive where key players are striving hard to increase their profits and there has been no major new competitor entered into the market in the past 2 years. The prices are mostly stable and competitors are trying to attract targeted customers by using different tactics.

BCL's product is in ____________ stage of lifecycle and it is recommended to__________.

(a) growth, differentiate product
(b) maturity, differentiate product
(c) maturity, market product aggressively
(d) decline, leave the market **(02)**

(ii) There is significant gas shortage in A-town. Tech Appliances (TA) is considering importing economical variants of electric ovens and geysers to meet the ever increasing market demand. TA has contacted supplier in China who has agreed to supply these products shortly. Currently, no competitor is offering such variants in A-town.

By using Porter's five forces model, it can be inferred that:

(a) threat of new entrants is high and bargaining power of buyers is high
(b) threat of new entrants is high and bargaining power of buyers is low
(c) threat of new entrants is low and bargaining power of buyers is high
(d) threat of new entrants is low and bargaining power of buyers is low **(01)**

(iii) Which of the following statements is correct about aggressive working capital funding policy?

(a) All permanent assets as well as part of the fluctuating current assets are financed by long-term funding
(b) All permanent assets as well as part of the fluctuating current assets are financed by short-term funding
(c) All fluctuating current assets as well as some of the permanent part of current assets are financed by short-term funding
(d) Only fluctuating current assets are financed by short-term funding **(1.5)**

(iv) Which of the following is **NOT** the step for implementation of a risk management system?

(a) Demonstrating commitment to risk management and allocating appropriate resources
(b) Developing an appropriate implementation plan including deadlines
(c) Identifying where, when and how different types of decisions are made and by whom
(d) Ensuring that the organization's arrangements for managing risk are clearly understood and practiced **(01)**

(v) Hamza Limited's production process is very mechanized. The process involves four machines. Machine Maintenance Department (MMD) informs that if one of the machines breakdowns, it will not affect significantly on the production process. However, breakdown of more than one machines together would stop the production process. According to the MMD, the chances of sudden breakdown of anyone of the four machines is 3%.

The Manager Production wants to sign a contract with a company in order to have backup machines if any such unforeseen situation arises. Before signing such contract, he wants to know the probability of breaking down of any two machines together?

(a) 0.0009
(b) 0.9409
(c) 0.0216
(d) None of the above **(1.5)**

(vi) Which of the following statements is correct about the firewall?

(a) It is a device installed at the boundary of a company to prevent unauthorized physical access
(b) It is a device installed at the boundary of an entity's system to protect it against the unauthorized access
(c) It is a kind of wall built to prevent fires from damaging the corporate assets
(d) None of the above **(01)**

(vii) Danish Ibrahim is considering a start-up business. He has performed the feasibility of business and is very optimistic about its future prospects. The business would require the investment of Rs. 5 million for financing capital assets and working capital. Danish has Rs. 2 million as savings and looking for Islamic mode of financing for the remaining amount. He does not want any interference from finance provider in making business decisions.

Danish should opt for:

(a) Murabaha
(b) Ijarah
(c) Mudaraba
(d) None of the above **(01)**

(viii) Platinum Limited introduced performance based bonus scheme (bonus scheme) for the sales team last year. The management expected that bonus scheme would improve the overall productivity level by at least 10%. It has gathered following data of number of units sold by each sales personnel before and after the introduction of bonus scheme:

Sales officer	Before bonus scheme (units sold)	After bonus scheme (units sold)
Khadija	500	400
Shahzaib	400	450
Zainab	450	400
Kashan	600	650
Saleem	450	500
Rida	550	500
Salman	400	950

If management takes the mean to determine the average increase in productivity level then it can be concluded that:

(a) bonus scheme is effective as it results in an average increase in productivity level by approximately 15%
(b) bonus scheme is not effective as it fails to meet the management expectation of at least 10% increase in productivity level of sales team
(c) bonus scheme is effective as it results in an average increase in productivity level by approximately 13%
(d) bonus scheme does not have any effect as increase in number of units sold is compensated by decrease in number of units sold **(1.5)**

(ix) Continuing from above case scenario, if management takes a decision on the basis of mean for average increase in productivity level, it can be said that:

(a) the management has rightly chosen mean for decision as it is only method that accounts for all values of the data
(b) the management has rightly chosen mean for decision as it is least affected if there are any outliers in the data
(c) the management has wrongly chosen mean for decision as it is more affected if there are any outliers in the data
(d) the decision would remain unaffected if management had chosen any other method for average **(1.5)**

(x) Assume that two regression coefficients are known. Which of the following formulas will help in computing the coefficient of determination?

(a) $b \times d$
(b) $\sqrt{b \times d}$
(c) $b \div d$
(d) None of the above **(01)**

(xi) Tracking employee training, skills and performance appraisals are examples of a human resource information system operating at the ________________:

(a) operational level
(b) management level
(c) knowledge level
(d) strategic level **(01)**

(xii) Which of the following information is **NOT** required while computing cost of equity under capital assets pricing model (CAPM)?

(a) Risk free interest rate
(b) The expected earnings
(c) The beta for the firm
(d) The expected market return **(01)**

Q.2 Fashionista by Agha Ansari is considering growth opportunities for its organisation which has the following divisions:

Salon:
This division was a brainchild of Agha Ansari. It was established in early 1990s and got immediate recognition and appreciation because of state-of-the-art design and highly qualified stylists. This division has a dominant position having substantial market share. Although overall market is maturing and has low growth rate, this division has been earning high returns on investment.

Cosmetics:
This division was established six years ago. The cosmetic industry has been emerging; however, presently this division has low market share.

Required:
By using Boston Consulting Group Matrix:
(a) identify and discuss the quadrants in which above divisions fall. **(06)**
(b) discuss any **two** strategies that Fashionista may adopt for each of its divisions. **(08)**

Q.3 Quick Relief Limited (QRL), a leading pharmaceutical company, is considering starting its operations in Malan, a democratic socialist country. It has conducted environmental scan and summarized the following information.

The pharmaceutical industry in Malan is regulated through Drug Regulatory Framework. The overall health environment is not conducive. Despite of increasing rate of inflation and declining consumer disposable income, demand for pharmaceutical products has been increasing considerably. Over 40% of population comprises of children and old age people. Interest in healthy life style is getting popularity among youth.

The government of Malan has introduced many business friendly policies particularly for pharmaceutical industry, by allowing tax holidays as incentive for new investments, and granting subsidized interest rate loans to encourage research and development activities.

The trend of e-commerce is emerging in the country and more and more people are using mobile apps and social media for making online orders. The key players in pharmaceutical industry have been using social media to market their products and CSR activities; such as use of renewable energy, conducting free public health awareness sessions, sponsoring treatment of needy patients, etc.

Required:
Perform PESTEL analysis (**except for analysis of environmental factors**) of pharmaceutical industry in Malan. **(09)**

Q.4 Zymal Aryan (Zymal), a chartered accountant has recently been appointed as CEO of Palate Foods Limited (PFL), which is engaged in the manufacturing and marketing of ready-to-cook food.

In a recent meeting, Marketing Head informed Zymal that key ingredients for ready-to-cook food would not be available due to payment dispute with a foreign supplier. Alternatively, PFL would buy local ingredients which would not be of as good quality as imported ingredients. However, marketing head further informed that ready-to-cook food would be aggressively marketed as new and improved products. When Zymal questions the ethical stance, she is informed that such practice is a marketing norm and disclosure of that information would adversely impact product demand and profitability which would not be acceptable to shareholders of PFL.

Required:
Identify and explain the fundamental principles of Code of Ethics of ICAP that may be compromised if Zymal proceeds with the marketing head's strategy. **(07)**

Section B

Q.5 Double Crown Limited (DCL) is engaged in manufacturing of a product Zee. Sales projections according to DCL's business plan for the financial year ending 30 June 2022, are as follows:

	January	**February**	**March**	**April**
	----------------- Rs. in million	**-----------------**		
Sales	60	55	70	68

Additional information:

(i) Goods are sold at a gross margin of 40% on sales.
(ii) Ratio of direct material, direct wages and overheads is 6:3:1 respectively.
(iii) Normal loss is 5% of the units completed.
(iv) Inventory levels maintained by DCL are as under:

Direct materials	Next month's budgeted consumption
Finished goods	50% of next month's budgeted sales

(v) 10% of all purchases are in cash. Remaining purchases are paid in the following month.
(vi) Direct wages include DCL's contribution at 5% of the direct wages, towards canteen expenses. An equal amount is deducted from the employees' wages. Direct wages are paid on the last day of each month. Both contributions are paid to the canteen contractor in the following month.
(vii) Overheads for each month include depreciation on plant and machinery and factory building rent, amounting to Rs. 0.2 million and Rs. 0.1 million respectively. The rent is paid on half yearly basis in advance on 30 June and 31 December each year.

Required:
Prepare budget for material purchases, direct wages and overheads, for the month of February 2022. **(10)**

Q.6 Agha Limited (AL), a family owned business, is considering expanding its operations. The expansion would require the finance amounting Rs. 50 million. Agha Junaid, CEO, has proposed to finance the expansion through a bank loan as he believes that financing through equity shares outside the family would mean sharing the decision making power in the board meetings and AL is not ready to compromise on that.

Fauzia Agha, Finance Director, mentioned that AL's bank is offering loan on strict terms and conditions thereby increasing the future compliances. She has proposed that AL should finance through issue of equity shares. She believes that new shareholders would only have stake of 10% in shareholdings of AL and therefore, have barely any say in decision making.

Required:

(a) Evaluate the proposals of CEO and Finance Director.

(b) Recommend how AL may finance the expansion. **(08)**

Q.7 Latte Limited (LL) is considering to accept a five-year proposal from Mocha Limited (ML) for supply of a product namely K44. ML would use K44 as a raw material for its main product. Details of the proposal and related matters are summarized as follows:

(i) Initial investment in the specialized machinery is estimated at Rs. 60 million. At the beginning of year 4, LL would require a major overhauling on this machinery amounting to Rs. 10 million. The machinery can be disposed of at 80% of written down value at the end of project.

(ii) In year 1, LL would supply 18,000 units of K44 to ML at Rs. 5,000 per unit. The supply would increase by 5% per annum from year 2 onward.

(iii) Variable cost is estimated at Rs. 4,000 per unit for year 1. Fixed cost associated with the proposal (other than depreciation) is expected to be Rs. 250,000 per month, out of which Rs. 50,000 would be allocated overheads.

(iv) Impact of inflation on revenues as well as all costs would be 7%.

(v) Tax rate would be applicable at 30% and tax would be payable in the year in which liability would arise. Tax depreciation on machinery would be allowed at the rate of 25% under reducing balance method.

(vi) The cost of capital of LL is 15%.

Assume that except stated otherwise, all cash flows would arise at the end of year.

Required:

(a) Using net present value method, advise whether LL should accept the proposal. **(11)**

(b) Determine the internal rate of return (IRR) of the project. **(03)**

Q.8 In December 2019, finance department of Beacon Limited (BL) prepared the following summary ageing schedule of BL's account receivable of last four years:

No. of days outstanding	Up to 15 days	16-30 days	31-60 days	More than 61 days
Account receivables recovered (%)	72%	15%	10%	3%

COVID-19 pandemic has significantly affected the various sectors of the economy. The recovery manager is worried that this downturn may affect the ageing of account receivable prepared by the finance department in December 2019. In this context, her team has selected 250 customers from whom amount has been recovered in 2020. These selected customers are tabulated as follows:

No. of days outstanding	Up to 15 days	16-30 days	31-60 days	More than 61 days
Account receivables recovered (no.)	159	28	47	16

Required:
Advise whether it can be concluded that the ageing schedule has changed because of the COVID-19 pandemic. **(06)**

Q.9 Jamal Limited (JL) is intending to expand its existing operations and considering to issue bonds to finance the expansion.

You have been provided with the following extracts from JL's financial statements:

Statement of Financial Position

	Rs. in '000
3 million ordinary shares of Rs. 100 each	300,000
Retained earnings	400,000
10% Long-term loan	650,000

The shares are quoted at Rs. 475 cum dividend. The dividend of Rs. 25 per share is due shortly.

JL has paid out following dividends during the past four years:

Year	20X1	20X2	20X3	20X4
Dividend	10	15	18	20

The loan was obtained from a bank 2 years ago and is repayable in 10 years' time.

The tax rate applicable to JL is 30%.

Required:
Determine JL's weighted average cost of capital (WACC). **(06)**

Q.10 (a) Azad Limited (AL) is engaged in manufacturing and selling of consumer goods. Due to on-going pandemic, some of the customers of AL are in financial crunch. There is also news circulating that one of the major customers of AL might go bankrupt shortly. Until now, AL has been lenient in offering credit terms to its customers to build a good relationship. However, the management is concerned and looking for ways to mitigate such situation in future.

Required:

(i) Identify and explain the financial risk being faced by AL. **(02)**

(ii) Suggest and discuss the strategies that AL may adopt to manage the financial risk identified in (i) above. **(04)**

(b) On 1 May 202X, a Pakistani company plans to hedge the foreign exchange risk of a export receipt amounting to USD 1,600,000 expected to receive on 31 July 202X. The current spot price is Rs. 174.0/USD.

A futures contract is for USD 125,000 and is available at Rs. 175.50/ USD. The value of a tick is Rs. 12.50.

Required:
Compute the outcome of hedge with future contracts if:

(i) spot rate of dollar on 31 July 202X is USD 174.155

(ii) spot rate of dollar on 31 July 202X is USD 176.225 **(05)**

(THE END)