## Certificate in Accounting and Finance Stage Examination

The Institute of
Chartered Accountants
of Pakistan

9 March 2022<br>3 hours - 100 marks<br>Additional reading time - 15 minutes

## Managerial and Financial Analysis

## Instructions to examinees:

(i) Answer all TEN 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.
(i) Agha (Private) Limited (APL), a family-owned business, registered as a private company two years ago. The business has grown exponentially and now Salman, CEO, is considering to expand the business by introducing a new product. He has developed a comprehensive business plan and is looking for source of finance for expansion. Salman is not sure regarding the tenure for which finance would be needed as it is highly dependent on how product would perform in the initial years.

Salman has approached a venture capitalist to finance the expansion of business. The venture capitalist would:
(a) likely finance the project as APL has excelled in the past two years
(b) likely finance the project as APL has a comprehensive business plan
(c) less likely finance the project as there is no clear exit route for venture capitalist
(d) less likely finance the project as it has only been two years since APL has registered as a private company
(ii) Furqan runs a chain of retail outlets of electronic items (items). Due to economic downturn, the demand for items has declined significantly. Furqan is considering to sell the items on credit to customers but he wants to charge some additional profit for allowing the customers to pay later. He is seeking the Islamic mode of financing for these transactions.

Which of the following modes of financing would be most appropriate?
(a) Mudaraba, however, Furqan would need to expressly mention the retail price of the items and the additional profit he would charge
(b) Murabaha, however, Furqan would need to expressly mention the cost of items and the additional profit he would charge
(c) Musharaka, however, Furqan would need to mutually agree the profit over the cost with the customers
(d) Credit transactions cannot be financed through Islamic mode of financing as Furqan wants to charge profit over the retail price
(iii) Free market and open competition are the elements of $\qquad$ ideology.
(a) democratic
(b) radicals
(c) dictatorial
(d) communist
(iv) Fortune Limited (FL) is in the process of issuing bonds to finance its project. It has been decided to issue bonds that are redeemable at par (i.e. Rs. 100) in three years' time. The bonds would carry annual interest at $10.4 \%$, payable at the end of each year.

The annual spot yield curve for a bond of this class of risk is as follows:

| Maturity | 1 year | 2 years | 3 years | 4 years |
| :--- | :---: | :---: | :---: | :---: |
| Yield | $8.0 \%$ | $9.5 \%$ | $11.0 \%$ | $12.5 \%$ |

FL should issue the bonds at:
(a) an approximate discount of Re. 1 per bond
(b) an approximate discount of Rs. 5 per bond
(c) an approximate premium of Re. 1 per bond
(d) a par value
(v) Which of the following is NOT an example of 'disruptive technology' at its inception in the market?
(a) A mobile application through which customers can order food from a choice of large number of restaurants
(b) A media streaming platform allowing customers to watch movies of their choice
(c) Smartphone with improved users interface and camera resolution
(d) An online social networking website where people can connect and share information with each other
(vi) Advocacy advertising focuses on:
(a) a particular product that needs marketing support
(b) core services offered by an organization
(c) an organization's CSR activities
(d) an organization's views on controversial political issues
(vii) HQ Group is considering entering into a business of coal extraction. The process of coal extraction is subject to strict environmental regulations. Any mishandling could result in heavy fines. The given risk can be classified as:
(a) pure risk that cannot be reduced
(b) pure risk that can be reduced by internal controls
(c) speculative risk that cannot be reduced
(d) speculative risk that can be reduced by internal controls
(viii) Alpha Limited is engaged in manufacturing consumer goods. The goods are manufactured in two factories and staff at head office is mostly involved in maintenance of accounting record. The CEO has directed the management to develop a risk management program. The management has identified various risks and classified them as high, moderate or low. Most of the high risks pertain to factories therefore, the management has prepared a risk management program for factories. It has a plan to train the factories' staff to learn to manage and respond to the risks. It is also agreed that management would proactively look for new risks at factories and continually incorporate such risks into risk management program.

Which of the following elements of Risk Management Framework: ISO 31000 is missing?
(a) Leadership and commitment
(b) Integration
(c) Implementation
(d) Evaluation
(ix) The data of marketing expense and sales for the past five years of Disney Limited (DL) is given below:

| Year | Marketing expense (x) | Sales (y) |  |
| :---: | :---: | :---: | :---: |
|  | ---- Rs. in million ---- |  |  |
| 2017 | 10 | 120 | $\sum \mathbf{x}=100$ |
| 2018 | 15 | 125 | $\sum \mathrm{y}=680$ |
| 2019 | 20 | 140 | $\Sigma \mathbf{x}^{2}=2250$ |
| 2020 | 25 | 145 | $\sum y^{2}=93150$ |
| 2021 | 30 | 150 | $\sum \mathrm{xy}=14000$ |

If the management of DL sets the budget for marketing expense for the year 2022 at Rs. 50 million, the expected sales would:
(a) increase by Rs. 34 million
(b) decrease by Rs. 34 million
(c) not be affected as sales is increasing in the same proportion to marketing expense
(d) be negatively affected as sales is declining in proportion to marketing expense

## Use the following scenario for answering MCQs (x), (xi) and (xii):

Haris is the owner of a small software house with 7 employees. At year-end, he conducted an employee job satisfaction survey using a questionnaire with a 5 -points rating scale (1-highly unsatisfied, 2-unsatisfied, 3-neutral, 4-satisfied, 5-highly satisfied). The results of the survey showed the mean score to be 2.71 . Both median and mode were at a score of 1 . Haris is satisfied as the mean score is close to 3 , which he takes as majority are either neutral or satisfied with their job. However, to his surprise, shortly after, more than half of the employees tendered their resignation.
(x) What do the scores indicate about the satisfaction level of the employees?
(a) Most of the employees are highly satisfied with their job
(b) Employees are either highly satisfied or highly unsatisfied with their job
(c) More than half of the employees are satisfied with their job
(d) No conclusion can be drawn from these scores
(xi) Which central measure should be used in this case?
(a) Mean
(b) Median
(c) Mode
(d) Central measure cannot be used in this case
(xii) What is a possible data set for these results?
(a) $1,1,1,1,5,5,5$
(b) $1,1,1,2,2,4,4$
(c) $1,1,1,1,4,4,5$
(d) $1,2,2,3,4,4,5$
Q. 2 AUM manufactures and sells two products. Presented below is the information available on each of the two products:

## Product 1:

This product is the first product AUM introduced in the market and carries strong brand value. Its repute carries positive influence on many other AUM business activities. When the product was introduced, its market share quickly grew to $4 \%$ and has remained steady for a long time now. Its market share is $7 \%$ less than the market leader. The overall market is growing by $2.5 \%$ year on year basis.

## Product 2:

This product has been consistently selling and enjoying high profits in the same market for quite some time now. The annual market growth for this product is $5 \%$ and market share is merely $1.5 \%$ less than the only competitor in the market.

## Required:

For each of the products presented above:
(a) Identify the quadrant and explain the corresponding strategies from the perspective of Boston Consulting Group (BCG) Model.
(b) Highlight the relevant criticism of BCG Model and recommend future strategies accordingly.
(Note: $10 \%$ is taken as a low/high cut-off for market growth under BCG model)
Q. 3 Rizwan, a chartered accountant and the CFO of Cure Pharma (CP), has called for proposals from three banks, including Sotel Bank (SB), to take up CP's salary disbursements. Rizwan maintains his personal bank account in SB and has recently applied for personal loan. He received a call from the manager of SB who reminded him of their great banking relationship. Apart from the discussion of the proposal, the manager also informed that he has requested the credit team to offer good terms for Rizwan's personal loan.

## Required:

Identify, explain and relate the fundamental principles of Code of Ethics of ICAP that Rizwan may compromise in the above situation.
Q. 4 Identify and briefly explain the type of information system used in each of the following examples:
(i) Book keeping and sales processing systems.
(ii) A budgeting and budgetary control systems.
(iii) System designed to provide information, advice and recommendations on pharmaceutical products to doctors at a hospital.
(iv) System that includes statistical and forecast models to help managers assign annual sales targets.
(v) An integrated system that connects all departments in the organization.
Q. 5 Saldia, a country in Asia, does not allow import of automobiles as a national policy. It is now considering to dissolve this policy. Discuss the impact of allowing the import of automobiles on each of the Porter's five competitive forces on Saldia's automobile industry. Your answer should also clearly mention whether the changed policy would strengthen or weaken each of these forces.

## Section B

Q. 6 Zaryaab Limited (ZL) is engaged in manufacturing and selling sports goods. Following information has been extracted from the latest financial statements of ZL:

|  | Rs. in '000 |
| :--- | :---: |
| $8,000,000$ ordinary shares @ Rs. 10 each | 50,000 |
| $8 \%$ bank loan | 25,000 |

## Other information:

(i) Shares of ZL are currently trading at Rs. 25 each.
(ii) The return on government bonds is $6 \%$ whereas the average return on market investments is $10 \%$. The average equity beta for ZL's share is 0.9 .
(iii) The tax rate applicable to ZL is $30 \%$.

ZL is planning to set-up another factory in Peshawar for which it would need finance of Rs. 150 million for four years. Following two financing proposals are under the consideration of ZL's management:
(i) Issue $9 \%$ preference shares of Rs. 100 each. The preference shares would be redeemable at par at the end of $4^{\text {th }}$ year.
(ii) Issue $9 \%$ bonds of Rs. 1,000 each. The bondholders would have a right to either convert each bond into 35 ordinary shares or redeem it at a premium of $10 \%$ at the end of $4^{\text {th }}$ year. The market value of ZL's shares is expected to increase by $7 \%$ per annum.

## Required:

Recommend the financing proposal that would result in lower weighted average cost of capital (WACC). (Show necessary computations)
Q. 7 Shaheen Limited (SL) is engaged in manufacturing and selling textile products. SL procures the material locally which is then manufactured and exported to customers. The management of SL is concerned over high volatility in foreign exchange rates. The receipt of USD 50,000 from a customer is expected in three months' time and management is considering to hedge the foreign exchange risk.

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

|  | USD 1 |  |
| :--- | :---: | :---: |
| Spot | Buy | Sell |
| 1 month forward | 178.650 | 179.800 |
| 3 months forward | 177.745 | 178.795 |


|  | Deposit \% | Borrowing \% |
| :---: | :---: | :---: |
| USD | 1.25 | 2.75 |
| PKR | 6.75 | 9.75 |

## Required:

Determine which of the following options would be more beneficial for SL:
(a) Hedging through forward contract
(b) Hedging through money market
(c) No hedging. Assume that on the date of settlement of transaction, spot rate is USD 1 = PKR 178.15.
Q. 8 Decor Limited (DL) is engaged in selling home decoration items. DL has provided you the following information based on its latest management accounts:

| Average inventory | Rs. in '000 |
| :--- | :---: |
| Average trade debtors | 6,000 |
| Average trade creditors | 7,500 |
|  | 3,800 |
| Sales |  |
| Cost of sales | 50,000 |

The management of DL is concerned over increasing working capital requirement that is centrally managed through bank overdraft facility. As per arrangement with the bank, DL has overdraft limit of Rs. 10 million.

For the next year, it is projected that sales and cost of sales would increase by $25 \%$ and $15 \%$ respectively. This would result in:

- average inventory to increase by $30 \%$
- average trade debtors to increase by $20 \%$
- average trade creditors to increase by $10 \%$

The CFO is of the view that DL would not be able to manage its working capital requirement within the bank overdraft limit for next year. He has suggested that DL should take certain actions to follow industry average ratios which are given below:

| Industry average ratios | ${ }^{*}$ Number of days |
| :--- | :---: |
| Inventory holding period | 50 |
| Trade debtors' collection period | 45 |
| Trade creditors' payment period | 30 |

*Based on 365 days a year

## Required:

(a) Determine the cash operating cycle for the next year.
(b) Validate CFO's view regarding management of working capital requirement if:

- DL does not follow industry average ratios
- DL follows industry average ratios
(c) List down any two actions that management of DL may take to reduce the length of its cash operating cycle. Also, mention any two risks associated with those actions of management.
Q. 9 Star Capital (SC) is a financial institution that offers credit facility to its customers among other services. SC is looking to waive off annual fee for the credit facility if a customer has a balance above a certain limit. Arsalan, Head of Credit Department, determined that waiving off annual fee could be justified only if customers maintain an average monthly balance of more than Rs. 70,000 in a given year. A random sample of 900 customers' balances is obtained. The monthly mean of the sample data is Rs. 71,000. It is also known that the data is normally distributed with a standard deviation of Rs. 30,000. Arsalan is looking to apply statistical analysis to determine whether to waive off annual fee or not.


## Required:

(a) Determine and explain the type of test that will be applied in this case.
(b) What conclusion can Arsalan draw from the given data, using a $10 \%$ significance level (critical value $=1.28$ )?
Q. 10 Comfort Wear Limited (CWL) is engaged in selling men activewear (units) through its retail outlets. The extracts from CWL's last year management accounts have been provided as follows:

|  | Rs. in '000 |
| :--- | :---: |
| Sales [5,000 units @ Rs. 2,500] | 12,500 |
| Cost of goods sold | 6,875 |
| Gross profit | 5,625 |

The management is considering setting up kiosks in four major shopping malls. The finance manager has gathered following data in this regard:
(i) Kiosks will set-up at the cost of Rs. 250,000 each. Kiosks would have estimated useful life of three years, subject to a depreciation of $40 \%$ on reducing balance method. At the end of three years, kiosks would have no residual value.
(ii) 4,000 units would be sold through all kiosks in the first year. It is estimated that $20 \%$ customers of retail outlets would shift to kiosks.
(iii) The past trend of retail outlets sales has revealed an average $5 \%$ increase in units' sale each year. It is expected to continue for both retail outlets and kiosks.
(iv) In the first year of kiosks' sales, a discount of $15 \%$ would be offered on retail price. However, discount would be reduced to $10 \%$ for subsequent years' sales.
(v) The rent for each kiosk's space would be Rs. 150,000 per annum.
(vi) The marketing campaign for kiosks would be carried out at Rs. 50,000 for the first year. However, it would be reduced to $50 \%$ for subsequent years.
(vii) One sales person would be hired for each kiosk. He would be paid Rs. 20,000 per month in addition to $1 \%$ commission on retail price of each unit sold through kiosk.
(viii) CWL's cost of capital is $18 \%$.
(ix) Applicable tax rate is $30 \%$ and tax is paid in the year in which the liability arises.
(x) All revenues and costs are quoted on today's rate that is expected to remain same in the first year. Thereafter, the estimated annual inflation of $10 \%$ would be applicable for all future revenues and costs.

## Required:

By using net present value method, recommend whether CWL should set-up kiosks.
(All cash flows occur at the end of year except for cost of setting-up kiosks)

## (THE END)

