Certified Finance and Accounting Professional Stage Examination

Strategic Business Finance

5 September 2026
100 marks

ICAP

CRN: | | | | | | |

Name: ____________________

INSTRUCTIONS

Please carefully read the following instructions:

1. You are required to access your answer working area by using your Student ID and Password as mentioned on your Admit Card.

2. The overall duration of the exam is 3 hours and 30 minutes, which includes the 15-minute reading time and an extra 15 minutes of time that has been allocated due to the introduction of computer-based examinations.

3. All **five** questions are compulsory. There is no specific time allocated for individual questions.

4. An auto-save function runs every minute. Further, your answers are saved automatically when you navigate between questions or click on the > **(NEXT)** or < **(BACK)** symbols.

5. Each question provides a designated answer area with a Rich Text Format (RTF) editor for writing your answers. You must answer each question within its respective RTF editor only. **Answers written in another RTF editor instead of the designated RTF editor for the question or more than one question answered in a single RTF editor shall not be considered for marking.**

6. Below the RTF editor, a spreadsheet is provided to facilitate examinees in doing rough calculations or other workings. **However, please note that any work performed in the spreadsheet will not be considered for marking. To ensure your work is considered, you must copy and paste it from the spreadsheet to the RTF editor.**

7. You may use MS Excel for rough working. However, please remember that any work performed in this application cannot be copied into the examination software, and vice versa. Furthermore, any such work will not be uploaded with your exam for marking.

8. You may use pen and paper for rough work, but please note that pen and paper work should only be done on the last page of the question paper that are specifically allocated for this purpose. Remember that any rough work done on this page will not be uploaded with your exam for marking.

9. In accordance with the open book policy of this paper, you are allowed to use only digital copy of the formula sheet. Keeping a hard copy of any book or notes is not permissible and will be considered a violation under the policy on the use of unfair means.

10. An external calculator can be used, provided it is included in the list of permissible calculators issued by ICAP.

11. During the exam, access to any website other than exam software website and the digital copy of the formula sheet is strictly prohibited. Engaging in such activities will be considered a violation under the policy on the use of unfair means.

QUESTION 1

For the purpose of this question, assume today's date is **30 June 2026**.

Xioy Gaming Limited (Xioy) is an established company, based in Pakistan, that designs and retails computer games that are typically played on a games console. Xioy is renowned for 'adventure style' games and has gained awards and global recognition for some of its most successful games. The board is, however, considering diversification to a new genre of game by launching a 'car racing' game that has the working title of Bank Heist (BH).

During the last 12 months inhouse software developers have held focus group meetings with players from the target market. This has resulted in the development of a basic prototype version of BH, the costs incurred to date for the meetings and initial development are Rs. 500 million.

The initial response to the prototype has been positive; however, the board would like you to provide detailed financial analysis to assist with the decision as to whether to proceed to full development and launch of BH.

The following information will be useful for your analysis:

Operating cashflows
As this game is a different genre to usual the sales director is not confident on the level of demand. He has advised that there is a 50% chance that demand will be strong with 1 million games sold in the first year. However, there is a 30% chance that the sales will be just 500,000 in the first year and a 20% chance that it could be as low as 200,000.

Regardless of the number of units sold in year 1, sales in the remaining years will be 25% lower than each previous year. The game has a life of 4 years after which time no further sales will take place due to the short life expectancy of computer games.

The unit sales price for the first year i.e. year ending 30 June 2028, will be Rs. 20,000 and this will reduce by Rs. 5,000 in each subsequent year.

Most of the costs of the game are in development so once the product is launched gross profit can be assumed to be 90% of revenue and operating costs just 15% of revenue. Xioy pays tax at 29% in the year that the profit arises. Any losses can be assumed to generate a tax saving as the loss can be relieved against other profits within the company.

Investment cashflows
The development costs to finalise BH are significant at Rs. 12,000 million reflecting the high-fidelity graphics and extensive team of technical experts required to deliver the final product.

As this is a new area the company will use third party specialists for this work. The development will take a further 12 months before the game is ready to launch.

The development costs of Rs. 12,000 million will be incurred in 3 equal instalments with the first payment due at the end of June 2026, the next at the end of December 2026 and the final payment due at the end of June 2027. Development costs can be amortised on a straight-line basis for tax purposes; however, the expense relief will be matched to the 4-year life of the game, with the first deduction in the year ending 30 June 2028.

Manufacturing equipment costing Rs. 1,000 million will be purchased on 30 June 2027. The equipment is expected to have a 4-year life and have a zero value at the end. Tax depreciation is available on the equipment at a rate of 15% on a reducing balance basis, with a balancing allowance or charge in the year of sale or when the asset is scrapped. Tax depreciation is available in the year of purchase. As the asset is acquired on 30 June 2027, the first tax depreciation claim arises in the year ending 30 June 2027.

Xioy will need to invest in working capital when the game is launched on 1 July 2027, this can be assumed to be 10% of the following year's revenue. Working capital will be released gradually over the life of the project as the revenue falls.

Project appraisal criteria

Discount rate for NPV	10%
Target payback	3 years
Target ARR	10%

Notes for calculation of ARR:

- Initial investment includes all upfront costs including working capital.
- Average profit is to be calculated over the operating life of the game, excluding development time.

Required:

(a) Calculate the expected NPV, payback and ARR of the project and advise whether the launch should continue as planned. **(18 marks)**

The sales director is concerned that the initial selling price of Rs. 20,000 may be too high, and he has suggested that all prices should be reduced by 15%.

(b) Calculate the sensitivity of the project to the sales price and advise whether the launch price should be reduced as suggested by the sales director. **(03 marks)**

(c) Explain the limitations of sensitivity and expected values in the context of the scenario. **(04 marks)**

QUESTION 2

Decent Partners Limited (DPL) is a management consultancy company based in Pakistan. The board is considering replacing laptops provided to the consultants within the business. In recent months, there has been a significant increase in the number of calls to the IT support centre with many employees complaining that technical problems are not resolved quickly as there seems to be a shortage of replacement parts and the technical support team is therefore slow to resolve problems.

Historically, laptops have been replaced after 6 years; however, recent events have led the board to consider a shorter period of replacement of either 4 or 5 years.

The IT director has identified suitable laptops which would cost Rs. 28 million in total. To avoid further disruption, DPL plans to acquire the new laptops so that these can be delivered at the beginning of the next accounting period, in a few weeks.

There would be no support costs in the first year as laptops would be covered by the manufacturer's warranty. However, in the second year DPL anticipate that incremental support costs including replacement parts, would be Rs. 2 million. This is expected to increase by Rs. 1 million for each subsequent year reflecting the need for more replacement parts. These support costs are tax deductible along with tax allowable depreciation on the initial investment which is calculated at 15% on a reducing balance basis, with a balancing allowance or charge on sale. DPL pays tax at 29% in the year that the profit arises.

If laptops are kept for 4 years, the expected resale value will be Rs. 5 million; however, this falls to zero if these are kept for 5 years. DPL uses a cost of capital of 12% for investment appraisal.

Historically, DPL has always purchased laptops outright; however, as cash is limited at the current time the board would like to either purchase laptops using debt finance at 8.5% pre-tax or lease the assets. Initial research suggests that laptops would be available to lease at an annual lease payment of Rs. 7.5 million, payable in advance. DPL will still be responsible for the support costs under the terms of the lease agreement. At the end of the lease term, the lessor is entitled to receive expected resale value.

Required:

(a) Calculate the most cost effective replacement cycle for laptops. **(07 marks)**

(b) Assuming a 4-year replacement cycle is selected, calculate whether it is more cost effective for laptops to be purchased using debt finance or leased. **(08 marks)**

(c) Evaluate the non-financial factors that will influence the directors in their final decision on how to proceed with the replacement of laptops and recommend a way forward. **(05 marks)**

QUESTION 3

Nixe Holdings Limited (Nixe) is a large conglomerate with a diverse range of investments located around the world. The board typically invest in companies and industries that have high growth potential.

An opportunity has become available to invest in cocoa production in Ghana. Ghana is a developing country in Africa and is the world's second largest cocoa producer. Nixe is considering acquiring an underperforming business which has suffered as a result of underinvestment in recent years. Nixe plan to acquire and upgrade the production facility.

This will be Nixe's first investment in Ghana and its first investment in cocoa production and you have been asked to calculate a discount rate that will be suitable for evaluating the investment opportunity.

You have ascertained the following information:

	Pakistan	Ghana
Market information		
Ghana 10-year sovereign bond yields		22.8%
Pakistan 10-year treasury bond yields	11.5%	
Standard deviation equity market		50%
Standard deviation bond market		35%
Stock market return	18%	
Sovereign 1-year bond (deemed risk free rate)	8%	
Tax rate	29%	
Bueve Limited		
Industry	Cocoa producer	
Equity beta	1.5	
Debt beta	0.1	
Gearing (debt/debt + equity)	30%	
Nixe Holdings Limited		
Industry	Conglomerate	
Equity beta	1.2	
Debt beta	0.1	
Gearing (debt/debt + equity)	20%	

Assuming the investment goes ahead Nixe would prefer to use finance from Pakistani Bank for the investment to reduce the exposure to exchange rate risk.

Rather than take out new debt the board would like you to explain how it could use its existing approved debt finance of Rs. 20,000 million for the investment and use currency swaps to minimise its exposure to exchange rate risk. The existing approved debt is at a fixed rate of 9%.

You have undertaken some initial research and have identified that the Bank of Ghana (BoG) offers a swap with the People's Bank of China (PBOC) but not with the National Bank of Pakistan (NBP); however, the NBP offers a swap with the PBOC and not with BoG. You have been asked to demonstrate, with supporting calculations, how Nixe could create the desired swap.

The following information will be useful for your explanation:

Exchange rates	
Pakistan and China	1 PKR : 0.025 CNY
China and Ghana	1 CNY : 1.55 GHS
SWAPs	
PBOC – Variable (currently 3.5%)	BoG – Fixed 15%
PBOC – Variable (currently 3.5%)	NBP – Fixed 9%
Bank fees for arranging swaps	0.25% per swap agreement
Funds required for the investment	GHS 730 million

Required:

(a) Calculate a suitable cost of capital for the project, assuming that the investment will maintain Nixe's existing capital structure. **(09 marks)**

(b) Explain with supporting calculations how Nixe could use currency swaps to reduce exchange rate risk, include a calculation of the effective interest rate on the GHS loan. **(07 marks)**

QUESTION 4

For the purpose of this question, assume today's date is **30 June 2026**.

You work for Global Trading Limited (GTL) a multinational organisation with business interests in the US and in the Euro Zone. GTL would like advice on the best way to hedge against exchange rate risk in respect of some large transactions due to be settled at the end of December 2026.

The transactions are summarised below:

Receipts	Payments
USD 800,000	EUR 1,000,000
EUR 3,600,000	USD 5,000,000
USD 1,200,000	

GTL have agreed that the net EUR receipt should be converted into USD and this can be used to settle the net USD liability. Any remaining surplus USD will then be converted into PKR at the end of December 2026 using the spot rate at that time.

The following information is available:

	30 June 2026	31 December 2026 (Estimated)
Spot rates		
EUR/USD	0.8612	0.8556
PKR/USD	281	290
6 month forward rate premium		
EUR/USD	0.0068	
Interest rates (per annum)		
US	2.8% – 3.8%	
Euro Zone	1.3% – 2.2%	
December-dated futures		
Contract size: EUR 125,000		
Tick size: 0.0001 USD/EUR		
USD/EUR	1.1672	1.1688
December-dated exchange-traded options		
Contract size: EUR 125,000		
Strike price: USD/EUR 1.1650		
Options premium: USD/EUR – PUT	0.0077	
Options premium: USD/EUR – CALL	0.0030	

Required:

Advise GTL on the expected net PKR receipt in 6 months' time after using the following hedging techniques:

(i) Forward contract

(ii) Money market hedge

(iii) Futures

(iv) Exchange-traded options **(18 marks)**

QUESTION 5

You work for the finance department of Big Cat (Private) Limited (Big Cat). Big Cat is a company based in Pakistan that produces high quality television programmes. The company has achieved success with several award winning limited series and films, targeted at mainstream audiences.

The board of Big Cat have received an unsolicited offer from Sound Creations Limited (Sound), to acquire 100% of the share capital. Sound is listed on the Pakistan Stock Exchange and is a successful media company that is a major player in this industry.

You have been asked to produce a range of valuations for Big Cat to assist the directors in establishing if the offer represents a favourable value and whether the board should advise shareholders to accept the offer.

Sound have proposed either a cash offer or a share for share exchange. Assuming that the takeover is seen as desirable, you have been asked to advise with supporting explanations and calculations whether Big Cat's shareholders should accept the cash or share offer.

The following information will be useful for your analysis:

Big Cat: Financial position
Extract from the statement of financial position as at 31 May 2026

	Note	Rs. in million
Non-current assets		8,400
Current assets:		
Inventory	(i)	25,351
Trade receivables		582
Cash		408
Total assets		**34,741**
Current liabilities	(ii)	15,784
Non-current liabilities		0
Net assets		**18,957**

Notes:

(i) Inventory comprises work in progress, reflecting programmes that are currently under development. Most programmes are network commissioned; however, approximately Rs. 10,000 million relates to self-funded pilot programmes that Big Cat hope to sell to television networks once complete. There is no guarantee that a network will purchase the pilot programmes, if a buyer cannot be found, the programme would have a zero net realisable value.

(ii) The majority of Big Cat productions are commissioned by television networks such that the Rs. 15,000 million of current liabilities comprises deferred income for programmes that are in development.

Big Cat: Financial performance
The latest after tax earnings for the year ended 31 May 2026 were Rs. 1,692 million.

The projected operating cash flows after tax are as follows:

	Year ending 31 May 2027	Year ending 31 May 2028
	--------- Rs. in million ---------	
Operating cash flows after tax	1,900	2,000

Big Cat have not formally produced a forecast beyond 2028 but informally the board expect the cash flows to grow at an annual rate of 5% in subsequent years.

Sound Creations Limited

Current share price	Rs. 6,600
Current market capitalisation	Rs. 660,000 million
Expected share price after acquiring Big Cat	Rs. 7,200
Equity beta (β_{EG})	0.7
Debt beta (β_D)	0.1
Price to earnings (P/E) ratio	16
Gearing ratio [debt/(debt + equity)]	15%

Market information

Market return	18%
Risk free rate	8%
Tax rate	29%

The offer
Two mutually exclusive offers have been made for 100% of the share capital in Big Cat.

- Cash offer: Rs. 30,000 million; or
- Share offer: 5,000,000 shares in Sound

Required:

(a) Evaluate whether the cash offer represents a favourable value and advise if the Big Cat's board should recommend that the shareholders accept. **(11 marks)**

(b) Assuming the sale of Big Cat will proceed, advise whether the shareholders should accept the cash or the share offer. **(06 marks)**

(c) Briefly evaluate the advantages of a share offer from Sound's perspective. **(04 marks)**

(THE END)

Rough Sheet