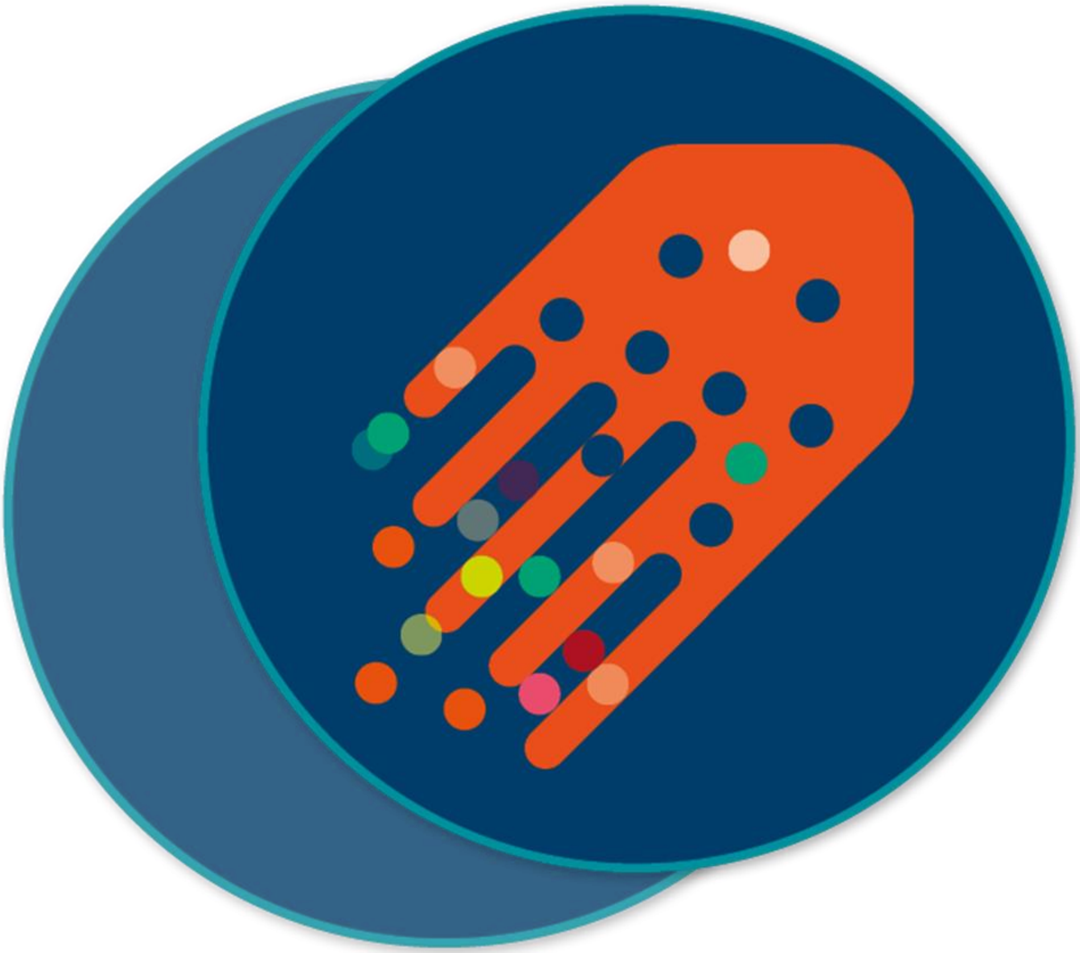
TREASURY EXCELLENCE AS STANDARD

ACT Practice paper 1

Certificate in International Cash Management (CertICM)



Practice paper for the Certificate in International cash Management (CertICM)

Based on the syllabus assessed from 01 October 2021.

Introduction

This practice paper has been produced by the Awarding Body at the Association of Corporate Treasurers (ACT) to assist students in their preparation for the CertICM assessments. It contains a practice exam as well as practice answers.

Ideally, students should have completed the majority of their CertICM studies before attempting this practice paper. Students should allow themselves 120 minutes to complete the exam. They should then review their performance to identify areas of weakness on which to concentrate the remainder of their study time.

Although the practice exam in this guide is typical of a CertICM assessment, it should be noted that it is not possible to test every single aspect of the syllabus in any one particular exam. To prepare properly for the examination, candidates should make full use of the tuition options where available and read as widely as possible to ensure that the whole syllabus has been covered.

Assessment technique: CertICM

This paper is a professional paper that as well as testing theory expects application to practice at an operational level.

The best way to approach written assessments is to work methodically through the questions. Candidates should not spend too much time on any one question if you are struggling to think of an adequate answer. Remember you can flag any question to come back to later should you want to continue your way through the exam.

When all of the questions have been answered, it is prudent to use any remaining time to go through each question again, carefully, to double-check that nothing has been missed. Altering just one response could make the difference between passing and failing.

Please ensure you show your workings within your answer when prompted as this means there are marks available for the workings out. You will be able to make rough workings on a piece of paper during the exam and on screen should you wish to, however these will not count towards your final mark.

Assessment information

The CertICM assessment consist of 64 questions, split into sections A, B and C; each assessment is worth a total of 100 marks.

CertICM assessment test specification:

Section	Amount of questions	Marks available	Question format
Section A	20 Multiple Choice questions (MCQs) and 10 Multiple Response questions (MRQs).	**30**	This section will test a cross-section of knowledge to achieve breadth of syllabus coverage.
Section B	30 MCQs based on mini scenarios (1 scenario with 5 accompanying MCQs)	**30**	This section will test knowledge, analysis, application and justification as appropriate.
Section C	4 longer form questions	**40**	This section will be based on mini-scenarios common to practice. Questions will test knowledge, analysis, application and justification as appropriate.
Total	**64**	**100**	

Under exam conditions, **2 hours** (120 minutes) is allowed for the CertICM assessment.

When you take your actual exam, you will be sitting online using your own PC/Laptop. You have access to an online scientific calculator, but for the purpose of this test, you may use a non-programmable scientific calculator. There is a formula sheet located on page 31 that will also be accessible during your online assessment.

In order for you to determine how well you have performed, exemplar answers are listed at the end of this paper. There are also references to the relevant Learning Outcomes if you need to revisit the associated material.

Section A – 30 marks
This section consists of 20 Multiple Choice questions and 10 Multiple Response questions

A01 Which of the following is the most important core task performed by treasury?

A Achieving operational efficiencies.

B Bank account structuring.

C Managing financial risk.

D Reporting.

A02 Which of the following bank reporting formats best facilitates automated account receivable reconciliation?

A Excel spreadsheets of cash balances from each group subsidiary.

B Month-end reported cash balances from each group reporting unit.

C MT 940 end-of-day files from each group bank.

D Standard format XML statements from each group bank.

A03 A covenant which has to be met initially, and on certain other trigger events is known as:

A a contingent covenant.

B a default covenant.

C a maintenance covenant.

D an incurrence covenant.

A04 Which of the following would be the most appropriate solution for a large volume of intercompany transactions?

A Direct debit.

B Mobile wallet.

C Multilateral netting.

D Real-time gross settlement system (RTGS).

A05 Which of the following banking solutions is most likely to work best for the majority of large multinational corporates?

Maintaining:

A a single bank in each region of operation.

B a single global bank.

C a small number of banks per operating unit.

D a small number of banks per region of operation.

A06 When using exponential smoothing on a moving average forecast, an ‘α’ of 0.2 indicates that:

A a high smoothing constant is needed to adjust the forecast.

B a strong trend continues to affect cash flows.

C recent cash flows have been anomalous.

D there is a seasonal pattern to cash flows.

A07 'Leading and lagging’ intercompany transactions can be used as a tool to:

A automate the consolidation of cash balances.

B improve the accuracy of cash flow forecasts.

C manage restricted cash balances.

D reduce the value of payments operating through ACH systems.

A08 A SWIFT MT 101 message type is used for which of the following purposes?

A A balance report.

B A confirmation of debit.

C A request for transfer.

D An advice of cheque(s).

A09 A letter of credit is:

A a document signed by a carrier and issued to a consignor that evidences the receipt of goods for shipment.

B a written order by a drawer to a drawee to pay a named party, at a specified date.

C an instruction requesting a presenting bank to deliver documents only upon receipt of payment from an importer.

D an undertaking by an issuing bank, at the request of the bank's customer, to pay a named party a specified sum of money.

A10 'Conditions precedent' in a loan agreement are:

A assurances relating to the past and present condition of the borrower.

B requirements for the borrower to report to the lender any material adverse changes in the business.

C restrictions on the borrower imposed by the lender throughout the lending term.

D terms the borrower must meet prior to drawdown.

A11 How are units in a standard variable net asset value money market fund (Standard VNAV MMF) calculated according to the 2020 EU MMF regulation?

A At a constant price rounded to the nearest percentage point.

B At a constant price so long as the value of the underlying assets do not deviate by more than 0.2% from par.

C To the equivalent of at least five significant figures.

D To the equivalent of at least four significant figures.

A12 Which of the following is a feature of cash concentration pooling?

A Credit or debit positions of participants are always visible on their bank accounts.

B Interest debited or credited to each participant is characterised as bank interest.

C Participants' funds are co-mingled in a master account managed by treasury.

D The legal title to funds always remains unaffected.

A13 Within a typical treasury management system (TMS) transaction workflow process, which step immediately follows deal confirmation in the matching system?

A Approval.

B Limits check.

C Payment initiation.

D Settlement generation.

A14 According to the ACT's Ethical Code, a member who is offered a gift by someone who seeks to conduct new business with their employer should:

A accept the gift but insist on paying for at least half of its market value.

B accept the gift then duly disclose the details to their line manager.

C accept the gift.

D decline the gift.

A15 Revaluations resulting from the translation of currency balances will typically need to be accounted for in the:

A balance sheet.

B cash flow statement.

C income statement.

D statement of shareholders' equity.

A16 Which of the following ratios is a government most likely to impose as part of its thin capitalisation rules?

A Debt to equity ratio.

B Interest coverage ratio.

C Liquidity ratio.

D Net debt to EBITDA ratio.

A17 The impact of which of the following taxes is the most important to consider when arranging a cross-border intercompany dividend payment?

A Import duty.

B Stamp duty.

C Value-added tax.

D Withholding tax.

A18 Which of the following is a characteristic of a software as a service (SaaS) solution?

A Company data is usually held by the vendor.

B Company data is validated automatically.

C System installation can be carried out off site.

D The installation is in-house.

A19 Which of the following E-invoicing methods is most appropriate for business-to-consumer transactions?

A Electronic Bill Presentment and Payment (EBPP).

B Electronic Invoice Presentment and Payment (EIPP).

C Evaluated Receipts Settlement (ERS).

D Paid on Production (POP).

A20 In Africa, the MPesa system is:

A a digital currency.

B a messaging service.

C a mobile payments tool.

D an online insurance company.

A21 Which TWO of the following are defining features of notional pooling for participating companies?

A Higher interest charges and increased utilisation fees.

B Interest applied to participants' accounts is characterised as intercompany interest.

C Participants retain legal ownership of their own account balances.

D Participants' accounts are balanced to zero by the bank.

E The bank requires participants to sign a cross guarantee.

A22 Which TWO of the following types of system can include cash flow forecasting tools?

A Enterprise resource planning systems (ERPs).

B Multilateral netting systems.

C Net settlement systems (NSSs).

D Real time gross settlement (RTGS) systems.

E Treasury and cash management systems (TMSs).

A23 Which TWO of the following are documents governing external relationships?

A Bank account mandates.

B Board minutes.

C Delegated authorities.

D Risk committee approvals.

E Segregation of duties document.

F Standard settlement instructions.

A24 Which THREE of the following are the attributes of a black swan event as defined by Taleb (2007)?

A After the event, it is explained.

B It can only have an extreme negative impact.

C It has an extreme impact – either positive or negative.

D It is an anticipated event.

E It is unpredictable.

A25 Which TWO of the following drivers are most likely to lead a business to build up a cash 'mountain' at head office?

A Conservative cash management.

B Economy-wide financial crisis.

C High interest rate environment.

D Stable banking conditions.

E Strong economic growth.

A26 Which of the following are quantitative measures of treasury departmental performance?

Select ALL that apply.

A Accuracy of cash forecasting.

B Efficiency of staff.

C Maintenance of external relationships.

D Provision of valued advice.

E Subsidiary participation in intercompany netting.

A27 According to IAS 7, which of the following characteristics define 'cash equivalents'?

Select ALL that apply.

A Held for resale.

B Highly liquid.

C Long-term.

D Readily convertible.

E Stable in value.

A28 According to the Organisation for Economic Co-operation and Development (OECD) model tax treaty, which of the following would create a permanent establishment?

Select ALL that apply.

A A branch of a foreign subsidiary.

B Maintenance of inventory purely for delivery.

C Pure purchasing activities.

D The extraction of natural resources.

E Utilising an independent agent.

A29 Which TWO of the following statements about cryptocurrency and blockchain are true?

A Administrative functions are disintermediated.

B Blockchains are always public.

C Ledgers are transparent to all participants.

D Once validated, records can only be changed in limited circumstances.

E Records are centralised.

A30 Which TWO of the following systems directly interface with the corporate's treasury dealing counterparties?

A Confirmation matching systems.

B Electronic balance reporting (EBR) systems.

C Electronic bank account management (eBAM) systems.

D Market information systems.

E Money market fund (MMF) portals.

Section B – 30 marks
This section consists of MCQs based on mini scenarios (1 scenario with 5 accompanying MCQs)

Case study 1

Fable Group (FG) is a large multinational corporate, headquartered in Hong Kong, which trades in multiple geographies and currencies, as follows:

- SGD in Singapore
- HKD in Hong Kong
- USD in United States
- CNY in China.

FG runs a multilateral netting process quarterly for all its subsidiaries for intercompany trade payments only. Unfortunately, the netting process is often fraught with invoice disputes, leading to delays. The finance director has posed two questions to the cash manager about the netting process; firstly, whether it is possible to include intercompany dividends and royalty payments into the process; and secondly, whether the netting frequency is optimal for the group.

The treasury team is due to refinance HKD76m bank debt for a further six-month (182 days) term. The team is comparing the cost of external bank market funds to the cost of borrowing USD10m from FG's US subsidiary by executing a foreign exchange (FX) swap. The US subsidiary is holding a significant cash surplus in a non-interest-bearing bank account.

FG has been offered a new HKD bank loan at a margin of 1% over the 0.5% central bank rate on a 365-day year basis. Available foreign exchange rates have been quoted as follows:

- USD/HKD spot rate: 7.6000

- USD/HKD 6-month forward rate: 7.7000.

The cash manager has also arranged a meeting with FG's small finance team based in China to discuss the following two issues:

1) an intercompany dividend payment to be made in CNY between a resident and non-resident account maintained in China. The cash manager advised that the payment amount must match the exact dividend declared but expects a smaller amount to reach the beneficiary account due to the fees that need to be paid to compensate the bank for central bank reporting of the transaction

2) the Chinese business has requested that FG's treasury approve the receipt of customer mobile wallet payments. The proposal is that a corporate wallet would be set up to receive customer payments. The cash manager has refused to approve the payment method for the time being but is prepared to reconsider this decision if it can be shown that the wallet could be integrated into the local enterprise resource planning (ERP) system.

B01 In response to the finance director's first question, the cash manager should advise that it is possible to include:

A both dividend and royalty payments.

B dividend payments only.

C neither dividend nor royalty payments.

D royalty payments only.

B02 In response to the finance director's second question, the cash manager is most likely to recommend changing the frequency of netting to:

A annually.

B monthly.

C semi-annually.

D weekly.

B03 Which of the following statements about the comparative costs of refinancing the maturing debt is true?

A Borrowing from the US subsidiary is HKD431,562 cheaper than external bank funding.

B Borrowing from the US subsidiary is HKD568,438 cheaper than external bank funding.

C External bank funding is HKD431,562 cheaper than borrowing from the US subsidiary.

D External bank funding is HKD568,438 cheaper than borrowing from the US subsidiary.

B04 Which type of bank fee is the cash manager expecting to affect the intercompany dividend payment?

A Account maintenance fees.

B Commissions in lieu of exchange charges (CILEs).

C Lifting fees.

D Turnover charges.

B05 The cash manager has currently refused to approve mobile wallet receipts in China due to concerns about the:

A cost of payment execution.

B finality of payments.

C speed of payment execution.

D visibility of payments.

Case study 2

Owen and Frank (OF) is a US-based private international project management firm that works with government clients to secure infrastructure financing for the purpose of international development. All of its clients are in developing markets with currency controls. OF bids on projects and once a bid has been won, revenue is generated by meeting certain agreed milestones throughout the project.

The cash manager of OF has produced a distribution model of how income is earned through the lifecycle of a typical project as follows:

Revenue pattern - weeks after start effect

Weeks	% revenue
1	2
2	5
3	7
4	1
5	14
6	21
7	36
8	14

Revenue pattern for a project - month of the year effect

Month of the year	% revenue
January	3
February	1
March	0
April	-2
May	2
June	3
July	0
August	-3
September	3
October	3
November	-2
December	-4
	4

A project worth USD430,876 has been won, so the cash manager is planning to use the following combined distribution model to forecast OF's revenue pattern:

Week commencing	Weeks after project start date	Month	% revenue	Revenue forecast
23-Jun	1	June		
30-Jun	2	June		
07-Jul	3	July		
14-Jul	4	July		
21-Jul	5	July		
28-Jul	6	July		
04-Aug	7	August		
11-Aug	8	August		

The biggest cash outflow for OF is payroll, which is highly variable each month. The cash manager has implemented a speciality forecasting system for payroll, which can automate repetitive manual tasks leading to more timely data for treasury reporting.

OF has access to SWIFT and only works with banks that are SWIFT enabled. All cash balance reporting is automated through the interface with its enterprise resource planning (ERP) system. The treasurer has calculated that reducing the daily minimum cash reserve OF holds in its treasury current account could result in annual savings of approximately USD40,000. The cash manager has advised the treasurer that a large minimum cash reserve is necessary to cover any unexpected outflows from the treasury account. This is needed due to poor visibility of large transactions.

OF has a large, trapped cash balance in Nigeria denominated in the local currency (NGN). The Central Bank of Nigeria (CBN) places regulatory restrictions on financial flows, but permits intercompany trade payments. The cash manager has been asked to find appropriate ways to reduce OF's NGN balance.

B06 What percentages of the total project income are forecast to be earned in week 1 and week 2 respectively?

A 2% and 5% respectively.

B 4% and 12% respectively.

C 5% and 8% respectively.

D 6% and 15% respectively.

B07 What is the project income forecast for week 8?

A USD47,396.

B USD54,834.

C USD60,323.

D USD73,249.

B08 What feature of the newly implemented payroll forecast system will be most beneficial to OF?

A Data analytics.

B Data visualisation tools.

C Machine learning.

D Robotic process automation (RPA).

B09 Which of the following types of intercompany payments could be considered for settlement in NGN?

A Dividends.

B Loans.

C Royalty charges.

D Share buy-backs.

B10 Which of the following technologies could best help OF's treasury realise the USD40,000 annual cost saving? The implementation of:

A Application Programming Interfaces (APIs).

B electronic banking platforms.

C host-to-host communications.

D SWIFTgpi.

Case study 3

Special Packaging Group (SP) is a cardboard box manufacturer based in the Netherlands. SP retails its boxes to small businesses across the whole of Europe and invoices in a range of currencies (EUR, PLN, CZK and CHF) but its functional currency is EUR.

SP has four bank accounts in its trading currencies which are notionally pooled in the Netherlands with SP's treasury team managing the pool header account. This allows access to a EUR3m pool overdraft facility. The pooling arrangement documentation imposes a single account overdraft limit of EUR7m and a gross overdrawn limit across all accounts of EUR10m. Intraday limits are set at EUR20m.

Despite efforts to promote electronic payments, SP still receives a large number of customer payments by cheque, including those in foreign currency (FCY). SP has requested that its bank 'negotiate' all future FCY cheque payments. The bank has agreed to this on a 'with recourse' basis.

SP is currently negotiating a contract with a new supplier of packaging in Sweden. The supplier has suggested documentary collection as the method of transferring title and making payment, but SP is concerned about the costs and added administration involved with trading in this way. The cash manager has advised the Swedish supplier that SP would prefer to use the same method as it uses for its longstanding contracts with other suppliers, which involves settling invoices 30 days after goods are shipped and delivered.

SP's cash flow forecast for 31 July is showing that a number of large payments and receipts are due, as follows:

EUR '000s	31 July Opening balances	Payments	Receipts	31 July End of day balances
Treasury account	214	0	565	779
Account 1	(450)	(1,415)	0	(1,865)
Account 2	5,907	0	4,309	10,216
Account 3	(6,487)	(976)	1,445	(6,018)
Account 4	(132)	(4,887)	546	(4,473)
Notional Pool balance	**(948)**	**(7,278)**	**6,865**	**(1,361)**

It is now 2 July and the treasurer has asked the cash manager for a funding strategy for the forecast deficit on 31 July. As the deficit is only due to be temporary, the cash manager plans on utilising the pool overdraft facility. In advance of this date, though, the cash manager will request a temporary extension to the pool overdraft limits, as required.

SP is forecast to generate sustained surplus cash balances in the latter part of the year, so the cash manager is currently drawing up a new investment policy for inclusion in the treasury policy. The cash manager's policy addresses credit risk and liquidity risk, but the treasurer is unhappy that a third key investment risk has not been addressed within the first draft of the new policy. The cash manager has agreed to add further content to the policy in this regard for further review.

B11 Which of the following is treasury achieving with its cheque strategy? It is:

A eliminating default risk.

B enhancing liquidity.

C managing its interest rates

D transferring counterparty exposure.

B12 Which of the following methods of trade settlement would SP prefer to use with its Swedish supplier?

A Avalisation.

B Cash in advance.

C Letter of credit.

D Open account.

B13 Which of the following is a feature of the cash manager's funding strategy for 31 July?

A The bank can demand repayment at will.

B The bank may charge fees for early repayment.

C The bank will charge interest based on the prevailing rate on the repayment date.

D The bank will expect repayment on a pre-agreed date.

B14 Which of SP's agreed overdraft limits will need to be extended on 31 July?

A Gross overdraft limit and single account overdraft limit.

B Gross overdraft limit only.

C Intraday limit only.

D Single account overdraft limit and intraday limits.

B15 Which of the following is the third KEY risk omitted by the cash manager in the first draft of the new treasury policy?

A Counterparty risk.

B Currency risk.

C Interest rate risk.

D Transaction risk.

Case study 4

Customised Conferences (CC) is a US-domiciled company that organises in-person conferences for professional bodies globally. The COVID-19 pandemic had a disastrous impact on the business with widespread cancellations and resulting losses. As a result, CC is now a business in crisis.

CC's treasurer and six-person treasury team have stopped working in an office together and are all working from home. While this new working arrangement is necessary, it has not helped the team. Its members have reported that they are stressed and overwhelmed with work.

The treasurer has therefore decided to make a list of all outstanding work so that it can be prioritised according to business needs. Non-urgent work will be delayed until a later date. The list includes the following items:

- update the 13-week cash flow forecast
- update the long-term cash flow forecast
- apply stress testing and scenario planning to the cash flow forecasts
- arrange a new committed credit facility to provide an additional source of liquidity
- update the investment policy in case of future investments
- update bank account mandates.

With regard to the investment policy, the treasurer had requested that key performance indicators (KPIs) should be included, which could be used to measure specifically treasury's performance in delivering the policy.

CC's chief executive officer (CEO) takes policy compliance and internal controls very seriously to ensure that the company abides by the provisions of the Sarbanes-Oxley Act (SOX). In addition, the treasurer has recently implemented new policies to demonstrate the strong ethical approach of the company.

B16 Which of the following items of work is the treasurer most likely to delay in light of the current business priorities?

A Cash forecasting.

B Committed credit facility.

C Investment policy.

D Scenario planning.

B17 In their capacity as a people manager, what should be the treasurer's key objective?

A Arranging training for the team to expand their knowledge.

B Conducting the team's annual reviews.

C Evaluating the team's performance against key performance indicators.

D Supporting the team emotionally.

B18 Which of the following KPIs should be included in the new policy to meet the treasurer's specific requirement?

A Interest cover ratio.

B Percentage of foreign exchange exposures hedged.

C The mix of committed and uncommitted facilities achieved.

D Variance from target value at risk (VaR).

B19 What is the most likely impact of SOX on CC's operations?

A Higher transaction limits.

B Less reliance on independent auditors.

C Lower investor confidence.

D More disclosure.

B20 Which of the following is most likely to be a new policy the CEO has implemented?

A Bank relationship management policy.

B Dividend policy.

C Finance policy.

D Whistleblowing policy.

Case study 5

The consolidated balance sheets of Arena Torena (AT) contain the following information:

ASSETS	Two years ago (GBP '000)	Last year (GBP '000)
Non-current assets		
Plant and equipment	2,000	2,300
Vehicles	1,500	1,800
Total non-current assets	**3,500**	**4,100**
Current assets		
Cash and cash equivalents	3,452	3,765
Marketable securities	2,900	4,356
Inventories	1,022	1,076
Accounts receivable	2,774	2,895
Total current assets	**10,148**	**12,092**
Total assets	**13,648**	**16,192**

AT is considering an investment in a six-month certificate of deposit. The treasurer is checking with the accounting team which asset classification would apply.

AT's treasurer is researching invoice financing solutions and has discovered that different options exist. If AT proceeds, the treasurer does not wish to increase the company's reported gearing and has also discussed how the derecognition implications of IFRS9 can be avoided with AT's accounting team.

It is now 31 July and the accounting team is reviewing how AT will need to report its non-current liabilities in future based on the Accounting Standards Board's clarification of what constitutes 'a right to defer settlement'. AT's reporting period ends on 31 December.

AT has a multi-bank revolving credit facility (RCF) which it arranged on 2 February last year for a four-year term. The RCF was classified as a non-current liability in last year's accounts. The credit facility documents require compliance reporting annually from date of inception.

AT is domiciled for tax purposes in the UK and earns GBP400,000 on a global basis, which counts as its domestic income. This income includes USD30,000 its subsidiary company generated from operations in the US. The tax rate in the UK is 25% and the tax rate in the US is 15%. The GBP/USD exchange rate is 1.4000.

A tax treaty is in place which allows AT to use the overseas tax it pays to offset and reduce the amount of tax due in the UK.

B21 Which of the following figures included in AT's balance sheet for last year represents the asset(s)? with the best liquidity?

A GBP1,076.

B GBP2,300.

C GBP2,895.

D GBP4,356.

B22 How would the investment the treasurer is considering be classified?

A Account receivable.

B Cash equivalent.

C Marketable security.

D Non-current asset.

B23 When would AT need to confirm compliance with the credit facility conditions each year from now on?

A 2 February only.

B 31 December only.

C Both 31 December and 2 February.

D Both 31 July and 31 December.

B24 What advice should the accounting team have given the treasurer regarding the invoice financing solution?

A AT should avoid paying the financing costs and financing should be on a non-recourse basis.

B AT should avoid paying the financing costs and financing should be on a recourse basis.

C AT should pay the financing costs and financing should be on a non-recourse basis.

D AT should pay the financing costs and financing should be on a recourse basis.

B25 Based solely on the information provided, how much tax would AT owe in the UK?

A GBP103,214.

B GBP94,643.

C GBP95,500.

D GBP96,786.

Case study 6

Mission Large (ML) is an expanding engineering company. Its treasury team is currently reviewing its technological needs in the light of ML's continuing growth plans.

ML has several service centres which execute all supplier payments, but bank reporting shows that the company is incurring high payment charges due to a disproportionate number of real-time gross settlement (RTGS) payments being made. Treasury is eager to find a technological solution to help it control payment formatting and timing that would create minimal impact on the service centres' current processes. As part of its technology review, ML plans to move its treasury management system (TMS) administration to its IT department.

During the COVID-19 pandemic, ML's treasury team had to change its method of signing documents from 'wet' signatures to digital signatures. The finance director (FD) is concerned about the risk of fraud involved in digital signatures, but the treasurer has reassured the FD that a third party is used to ensure signatures are genuine.

ML has completed the acquisition of a small start-up company that specialises in engineering technology. The start-up company is building technology which it believes will be a 'disruptive' innovator in the engineering space. The acquired company owned a small amount of Ethereum, which has now transferred to ML as a result of the acquisition.

B26 Which of the following solutions would be best suited to meet ML's specific supplier payment needs?

A A multi-bank dealing portal.

B A payment factory system.

C A trade finance documentation preparation system.

D An electronic bank account management (eBAM) system.

B27 Which of the following activities would move to the IT department as a result of ML's technology review?

A Designing spreadsheets to reduce manual data entry.

B Implementing straight-through-processing (STP).

C Management of user profiles.

D Managing the audit trail of deal execution.

B28 Which third party process for fraud prevention is the treasurer referring to?

A Certificate authority (CA).

B Identity authority (IA).

C Stamp security (SA).

D Transfer Hypertext Protocol (TPL).

B29 What are the most significant risks associated with the acquired start-up company?

A High customer acquisition cost and very tight margins.

B Large upfront investment and moderate growth prospects.

C Strong competitors and high cash flow requirement.

D Unknown demand and an unknown business model.

B30 Which of the following assets has ML acquired through the acquisition?

A Central Bank Digital Currency (CBDC).

B Fiat currency.

C Non-fungible digital tokens.

D Virtual cash.

Section C – 40 marks
This section consists of 4 case study form questions

Case Study 1

Healthcare Providers Ltd. (HP), which is listed on the Singapore Stock Exchange, is a provider of medical support and consultancy services to healthcare businesses in South East Asia.

HP's functional currency is SGD, but it has to trade in three currencies and in three countries because it has:

- a subsidiary in Singapore with SGD bank accounts. SGD is a freely convertible currency
- a subsidiary in Thailand with THB bank accounts. The Bank of Thailand has recently relaxed all currency restrictions on THB
- a joint venture (JV) with Thai Health, based in Thailand and trading in THB
- a subsidiary in Malaysia trading in MYR. The Bank Negara Malaysia (the central bank for Malaysia) has imposed currency controls on MYR.

In addition, the Singapore-based parent company has a domestic SGD bank account and a non-resident THB bank account in Thailand. Due to currency controls, the parent company is not able to open a MYR bank account.

HP had two bank accounts in Singapore with negligible deficit balances, but HP is completing a 100% acquisition in Singapore of a company called Gold Care (GC). GC has three bank accounts in SGD, one of which has a very large surplus cash balance. The other two have small surpluses.

In Thailand, HP has six bank accounts. Two of the bank accounts are associated with the JV and have large surplus balances. The remaining four accounts belong to the local subsidiary and have small cash surpluses.

In Malaysia, there are three bank accounts, each with a small cash surplus.

HP is refinancing its current borrowings with a new SGD-denominated revolving credit facility (RCF) with an initial term of four years, financed by its four relationship and cash management banks in its home market. These large banks offer a full suite of cash management solutions.

The RCF will fund the entire acquisition payment for GC and will also be used for liquidity management and cash headroom purposes going forward. Before finalising the lending agreement, the banks that will provide the RCF have requested a cash flow forecast from HP, using the pro forma statement method.

The RCF refinancing has fallen at a difficult time during the COVID-19 pandemic and the borrowing cost of the new RCF is much higher than the maturing one. As a result, the treasurer has asked the cash manager to utilise all internal funds to reduce the level of RCF borrowing, as this will be a more cost-effective solution for HP.

a. Discuss the potential cash management solutions and limitations that the cash manager should be aware of when optimising HP's internal cash balances to reduce RCF borrowing.

(5 marks)

b. Explain why HP's banks have requested a pro forma statement forecast and how they might use this in its assessment of HP's borrowing request.

(5 marks)

(Total 10 marks)

Case Study 2

Connex Bus (CB) is a large and sophisticated bus and coach travel company domiciled in the Netherlands, which serves much of western Europe. CB has recently acquired a bus travel provider in Morocco called MorBus.

The plan is for CB to leverage its technology and expertise in digital platforms to grow the MorBus business and improve its profit margins.

An onboarding plan has been developed. All relevant information relating to MorBus is being integrated into CB's own treasury systems. CB uses a treasury management system (TMS) which provides all the functions a treasurer would typically expect to manage workflow effectively.

In future Morbus will follow CB's policies and procedures, but its local treasury team in Morocco will continue to trade external deals, using their local banks and local knowledge.

The first priority for CB's treasury is to onboard MorBus' new and existing derivative trades into its TMS so that the counterparty limits of the newly combined group can be calculated and a check undertaken to ensure compliance with policy.

The two-person treasury team in Morocco will be able to define its own treasury transaction workflows within the TMS for its commodity (diesel) and FX deals, which it trades over the phone.

Due to the larger size of the combined business, CB's treasury team has proposed to the finance director that they get direct access to the SWIFT system to facilitate both business and treasury payments. The finance director has agreed to review the business case.

a. Explain how the treasury team based in Morocco might use CB's TMS effectively in the future.

(5 marks)

b. Explain the characteristics, cost structure and process of the SWIFT system and the benefits it would bring to CB's enlarged business.

(5 marks)

(Total 10 marks)

Case Study 3

Mille Bourses (MB) is a French IT company that specialises in the implementation of software for clients.

MB operates an in-house bank as its treasury structure. The treasury team looks after all aspects of the parent company's financial management. This includes the trading arrangements that exist between the parent company and MB's subsidiary company, which is based in Australia. The parent company also provides all the funding needs of the subsidiary.

MB recently experienced significant attention from the Australian tax authority regarding its transfer pricing arrangements, but MB's experienced treasurer managed to demonstrate that MB was meeting all of its required obligations.

The treasury team maintains relationships with ten banks which are all eager to secure a greater share of MB's ancillary business.

Currently, the treasury team uses a fully-integrated multi-bank dealing platform for most of its FX trades to deliver a straight-through-process (STP) into the treasury management system (TMS). However, MB still executes its non-deliverable forward (NDF) trades by telephone. MB's reporting shows that around 20-30 NDFs are executed monthly with a total nominal trade amount between EUR350-400m.

MB's multi-bank dealing portal provider has advised that NDFs can now be traded on the platform and the TMS provider has advised that there would be a one-off cost of EUR14,000 to integrate the new instrument type into the STP. MB is considering whether it is worthwhile to include NDFs in its multi-bank portal trading.

a) Explain how the treasurer could have demonstrated to the tax authority in Australia that MB was meeting its transfer pricing obligations.

(5 marks)

b) Discuss whether MB should trade its NDFs on the multi-bank portal.

(5 marks)

(Total 10 marks)

Case Study 4

Fresh and Quick (FQ) is a large supermarket chain in the United States with annual group revenues in excess of USD10bn.

FQ recently updated its medium and long-term cash flow forecasts, which it used to determine the size and duration of its upcoming funding requirements. As a result, FQ has issued the following US Commercial Paper (CP):

Face value	USD40m
Term	91 days
Discount rate	2.8500%
Credit enhancement costs	0.3800% on the face value
Dealer charges	0.1000%

FQ's funding manager has also agreed a new committed facility with three banks to meet FQ's longer-term cash requirements.

There are two financial covenants included in the new committed facility documentation:

- 'Net Debt' must not exceed a maximum of four times 'Earnings Before Interest, Tax, Depreciation and Amortisation' (EBITDA)
- 'Earnings Before Interest and Tax' (EBIT) must be maintained at a minimum level of five times interest paid.

The funding manager has asked FQ's cash manager to include these financial covenants in future cash flow forecasts and treasury reports.

a. Calculate the annualised all-in cost of FQ's recent CP issue.

(5 marks)

b. Explain why FQ's banks included the two financial covenants in its committed facility documentation and why it is important for FQ's cash manager to be aware of them.

(5 marks)

(Total 10 marks)

Formulae sheet: CertICM

Calculating proceeds of the sale of an investment in the secondary market

$$\text{Proceeds} = \frac{\text{Future Value}}{\left[1 + \left(\text{Interest rate} \times \frac{\text{Days}}{\text{Year basis}}\right)\right]}$$

All-in cost of borrowing commercial paper

Annualized All-In Cost

$$= \frac{\text{Total issue costs}}{\text{Issue proceeds}} \times \frac{\text{Year basis}}{\text{Days}}$$

All-in cost of borrowing using a committed credit line

Annualized All-In Cost

$$= \frac{\text{Interest charges + Commitment fee}}{\text{Average net drawdown}} \times \frac{\text{Year basis}}{\text{Days}}$$

Practice guide: Section A

Answers and references to relevant unit and learning outcome

Question No.	Learning Outcome	Answer		Question No.	Syllabus ref:	Answer
A01	LO1.1	C		A16	LO5.2	A
A02	LO1.2	D		A17	LO5.2	D
A03	LO1.4	D		A18	LO6.1	A
A04	LO1.3	C		A19	LO6.1	A
A05	LO2.1	D		A20	LO6.2	C
A06	LO2.2	C		A21	LO1.1	C, E
A07	LO2.4	C		A22	LO2.3	A, E
A08	LO3.1	C		A23	LO4.3	A, F
A09	LO3.2	D		A24	LO4.1	A, C
A10	LO3.3	D		A25	LO2.4	A, B
A11	LO3.4	D		A26	LO4.2	A, E
A12	LO3.5	C		A27	LO5.1	B, D, E
A13	LO4.3	D		A28	LO5.2	A, D
A14	LO4.4	D		A29	LO6.3	A, C
A15	LO5.1	C		A30	LO6.1	A, E

Practice guide: Section B

Answers and references to relevant unit and learning outcome

Question No.	Learning Outcome	Answer		Question No.	Syllabus ref:	Answer
B01	LO1.1	A		B16	LO4.1	C
B02	LO1.1	B		B17	LO4.1	D
B03	LO1.2	C		B18	LO4.2	D
B04	LO1.4	C		B19	LO4.3	D
B05	LO1.3	D		B20	LO4.4	D
B06	LO2.2	C		B21	LO5.1	D
B07	LO2.2	A		B22	LO5.1	C
B08	LO2.3	D		B23	LO5.1	C
B09	LO2.4	C		B24	LO5.1	A
B10	LO2.1	D		B25	LO5.2	D
B11	LO3.1	B		B26	LO6.1	B
B12	LO3.2	D		B27	LO6.1	C
B13	LO3.3	A		B28	LO6.1	A
B14	LO3.5	B		B29	LO6.2	D
B15	LO3.4	C		B30	LO6.3	D

C1a	**Syllabus refs: Unit 1:1.1 LO1; Unit 2:2.2 LO6**	HP has available internal funds that could be used to reduce its external borrowings on the new RCF and be more cost-effective than borrowing on the RCF. As HS's functional and funding currency is SGD, optimal available cash balances should be converted into SGD so that they can be used to repay SGD borrowings on the RCF. Firstly, looking at the SGD balances: post-acquisition of GC, HP will have five SGD bank accounts. It can be assumed that, once consolidated, there will be a surplus balance in SGD, as one of the GC accounts has a very large cash balance offsetting the negligible deficit balances mentioned. A pooling solution would work best for SGD, with the parent company account as the master/header account. Physical or notional pooling could be considered for these accounts depending on what is available in country and from its cash management bank. Once the surplus is swept or pooled to the master, the balance could be used to reduce RCF borrowings. Secondly, looking at the THB balances: all of the THB bank accounts are in surplus, so there is a benefit to optimising these funds. The parent company non-resident bank account should be used as a master/header account for a physical or notional pool to consolidate the local balances. Once the THB balances are consolidated, treasury could execute an FX swap to convert the THB into SGD. These funds would then be used to reduce RCF borrowings. LIMITATIONS It is most likely that the THB large surplus balances in the JV will not be available for HS to use to reduce debt. Most JV agreements mean that the bank accounts are ring-fenced for JV purposes only. There is no cash management solution available to make use of these funds. The small MYR balances are also not available for HS to use to reduce borrowings. While a local cash management structure could be implemented, the funds could not be converted into SGD, as the parent company does not have a MYR account. The currency controls mean that FX trading will not be available. These funds are unlikely to be available for HS to reduce debt.

C1b		The pro forma statement method is a strategic long-term cash forecast (covering periods of one to five years) and is based on projected income statements and balance sheets. It is normally derived from the corporate budgeting and planning system, usually looking ahead at expected sales patterns. The banks have requested a pro forma cash flow forecast to determine the financial sustainability of HP, which is vitally important to them as they are considering long-term lending (four years). The banks may have introduced more stringent lending criteria due to the fact that the RCF refinancing has fallen at a difficult time during the COVID-19 pandemic when bank liquidity may be affected. The banks will also be keen to see how the challenging economic conditions may affect HP's sales patterns in the longer term and to ensure that HP's income forecasts are updated to reflect the impact of the pandemic. Once the pro forma forecast has been prepared, it can be used to test different scenarios, which will be very useful for the banks. HP and the banks can use the forecast to test the scale of borrowing that HP will need and determine the most appropriate size of loan. The forecast will then demonstrate by projecting income statement and cash flows how HP's positive cash flows can be used to repay the loan.
C2a	**Syllabus refs: Unit 4:4.3 LO17; Unit 3:3.1 LO9**	The recommended 'best practice' treasury transaction workflow is as follows: Deal input – Approvals – Confirmation – Settlement generation – Payment initiation. **Deal input** The TMS must record all transactions performed by the locally based treasury team. Transactions will need to be input directly into the system, as deals are completed on the telephone. Depending on the TMS capabilities, it is recommended that the following be done at deal input stage: • competitive quotes for performance analysis purposes • check the deal against counterparty and other limits used by treasury • produce all the cash flows resulting from the deal (such as flows at the start or maturity of the transactions, or periodic flows such as interest)

		• initiate actions for events such as rate sets, or option expiry dates, for the relevant dates • pass the deal through the work-flow which is set up for the transaction type/amount/dealer • create the entries needed to record the transaction in the books of account • log hedge relationships required to satisfy the accounting requirements for obtaining hedge accounting treatment. **Approval** It is normally recommended that all transactions and payments must be authorised by someone other than the originator, but as the team in Morocco is so small, this may not be possible. If time zones allow, it would be good practice for the CB treasury team to approve deals. If not, the best solution would be for systems to be set up so that transactions outside of predetermined limits cannot be entered into the TMS. This would reduce the need for approvals if not logistically possible. **Confirmation** The TMS should produce confirmations in either letter format or, more usually for high volume treasuries, a file produced in the format required by the confirmation matching system. **Settlement generation** The TMS stores information about the firm’s own settlement instructions and those of its counterparties (part of its ‘static data’). These are usually allocated automatically to each transaction based on the type of transaction and currency. The TMS permits cash flows to be netted and/or split, either manually or automatically according to rules which have been defined. **Payment initiation** Once settlement instructions have been checked, the payment file can be produced in the format appropriate for the Morocco team.
C2b		The characteristics of the SWIFT system are that it provides: • standardised message formats for all transactions • high security - using ‘public key infrastructure’ (PKI) • high availability – zero ‘downtime’ • operations centres and regional processors. The process is:

		• data from the sending user is sorted and immediately despatched to receiving banks. The system transmits data, not funds. Member banks still need a correspondent bank to settle financial transactions. The cost is: • one-off membership fee • annual fixed fee • per item charges which reduce as volumes increase • SWIFT infrastructure and systems costs • member internal infrastructure and systems costs. The advantages to CB are all the efficiencies it brings, which will be helpful for the combined business. As the acquisition plan is around leveraging technology, the following will be useful: • standard message formats facilitate automated handling and STP • fast and secure • beneficiary bank gets speedy receipt of messages • reduced errors.
C3a	**Syllabus refs: Unit 5:5.2 LO21; Unit 6:6.1 LO22**	MB's treasurer could have provided evidence relating to any of the following: • MB's pricing arrangements for intercompany trading have been agreed on an arms-length basis • funding arrangements have been formalised in the same manner as with an external commercial bank • loan agreements stating borrowing rates and other terms and conditions have been signed • spreads are agreed for taking deposits or buying or selling currencies • management service agreements have been fully documented • all inter-company loans made have carried a market rate of interest • commercial foreign exchange rates have been used for transactions between MB's companies. MB has maintained documentation relating to its trading relationships and provided evidence that the terms are at market rates. • sources of daily rates such as Reuters, Bloomberg or The Wall Street Journal are examples of independent sources that might be used to corroborate the rates used.

C3b		It is recommended that MB does include NDFs into the multi-bank portal, as it will benefit from a controls and security perspective for a relatively significant number of sizeable deals. The benefits to MB of using the multi-bank portal for NDFs would be: • a significant reduction in the risk of error by reducing manual inputs into the transaction process once the NDFs are integrated into the STP • the ability to seek competitive quotes on the NDFs to ensure that they are receiving the best price available to them • the useful tool of 'price discovery' so that the dealer can demonstrate that business is being conducted in the best interests of the company. This can be difficult when dealing over the telephone, particularly in a small treasury team like that of MB's • the opportunity to spread their business more widely across the ten relationship banks. The analysis from the portal will be richer when showing which banks are providing them with the best quotes. This will make it an even more valuable tool in bank relationship management and negotiation • the ten relationship banks may prefer to auto-bid electronically on the NDFs, as this costs the banks less • the addition of more volume through the portal could also be better for the banks as there is more to compete for.
C4a	**Syllabus refs: Unit 1:1.4 LO4; Unit 3:3.3 LO11**	Issue costs = FV x (discount % + enhancement % + dealer %) x (days/year basis) = USD40,000,000 x ((0.0285 + 0.0038 + 0.001) x (91/360)) = USD40,000,000 x 0.0084175 = USD336,700.00 Issue proceeds = FV – discount amount = USD40,000,000 – (USD40,000,000 x 0.0285 x (91/360)) = USD40,000,000 – USD288,166.67 = USD39,711,833.33 The annualised all-in cost is calculated as follows: = $\frac{total\ issue\ costs}{issue\ proceeds}$ x $\frac{year\ basis}{Days}$ = $\frac{\$336,700}{\$39,711,833.33}$ x $\frac{360}{91}$ = 0.0335416 = 3.35%

C4b		The financial covenants in FQ's committed facility documentation are clauses that commit FQ to operate within pre-defined financial constraints. The net debt/EBITDA covenant is a leverage covenant setting out a maximum level of debt, relative to earnings. In this case the proxy used is earnings before interest, tax, depreciation and amortisation (EBITDA). This means net debt cannot exceed four times EBITDA. The EBIT/Interest paid covenant is a cover-ratio or coverage covenant requiring FQ to maintain a minimum level of earnings (EBIT) relative to interest paid. The interest paid will usually include all debt servicing costs. If FQ breached a financial covenant, it would likely constitute an event of default meaning FQ would have to renegotiate its terms with the banks well before there is a serious risk of insolvency. This means the banks can have an early warning system if FQ's financial situation deteriorates. The cash manager must make sure that measuring and ensuring compliance with financial covenants is not too onerous a task. The cash manager should regularly review covenant compliance and monitor forecast compliance to highlight any potential problems. This is particularly important when performing stress tests as compliance with banking covenants and the availability of credit facilities are critical factors.

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