



ACCA

Paper F7

Financial Reporting

Revision Mock
Examination

June 2017

Answer Guide

Health Warning!

How to pass

Attempt the mock examination under exam conditions BEFORE looking at these suggested answers. Then constructively compare your answer, identifying the points you made well and identifying those not so well made.

If you got the basics wrong then re-revise by re-writing them out until you get them correct.

How to fail

Simply read or audit the answers congratulating yourself that you would have answered the questions as per the suggested answers.

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Section A

1. B

Total services revenue = $125/100 \times \$200 \times 2 \text{ years} = \500

Total goods revenue = $\$3,000 - \$500 = \$2,500$

Total revenue (y/e 31 March 2015) = $\$2,500 + (6/24 \times \$500) = \$2,625$

2. D

Net proceeds		-v-	Total payments		\$000
Par value	6,000		Interest		
Less: Issue costs	(120)		$3.5\% \times 6,000$		
			$= 210 \times 7 \text{ years} =$		1,470
			+ Final redemption payment including premium		
					7,100
					<u>8,570</u>
	<u>5,880</u>				

Therefore finance cost = **2,690 (D)**

3. D

Annual expense = $\$1,500 \times 3 (\text{\#payments}) / 4 \text{ years} = \$1,125$

Expense (4 months) = $4/12 \times \$1,125 = \mathbf{\$375}$

DR Op. lease rental expense (SPL) \$375

CR Accruals (SFP) \$375

4. A

The IP is recognised at fair value at 31 March 2015 of **\$550,000** on the statement of financial position.

It has fallen in value from its previous fair value at 31 March 2014 of \$600,000 and so a loss of **\$50,000** is recognised through profit or loss.

5. C

Profit attributable to the ordinary equity holders = $\$500,000 - (10\% \times \$100,000) = \$490,000$

Weighted average number of shares = $400,000 + (400,000/2) = 600,000$

Basic EPS = $\$490,000/600,000 = \mathbf{81.7 \text{ cents per share}}$

6. C

Temporary difference = \$100,000

@20% = \$20,000 DT liability (carrying value > tax base)

Current year liability = \$20,000

Prior year liability = \$175,000

Reduction in liability = \$155,000 = gain

7. A

Opening	Effective Interest @ 7%	Cash Paid	Closing
\$475,000 = \$500,000 × 95%	\$32,900	(\$20,000) = \$500,000 × 4%	\$482,900
\$475,000 less 5,000 = \$470,000			

8. A

This is the correct treatment for a bargain purchase.

9. D

TK no longer controls Theta so it is no longer considered a subsidiary and does not need consolidating.

10. D

Apples, lemons and pears are examples of agricultural produce but not biological assets.

11. C

A is treated using split accounting and would have both a liability and equity element.

B is the purchase of a debenture so would give rise to a financial asset and not a financial liability.

D is treated as equity as the preference shares are irredeemable and there is therefore no obligation to pay cash.

12. B

13. B

The effective rate of interest is used to calculate the borrowing costs capitalised. Total annual interest in the first year of the loan is \$100,000 (\$2,000,000 × 5%)

Borrowing costs can only be capitalised from 1 October 2014, when borrowing costs are being incurred, and so only \$50,000 is capitalised, being six months from 1 October to 31 March.

14. C

Depreciation (1 July 2014 to 31 March 2015 – 9 months) = $\$500,000 / 10 \text{ years} \times 9/12 = \$37,500$

Carrying value = $\$500,000 - \$37,500 = \mathbf{\$462,500}$

Amortisation of government grant = $\$100,000 / 10 \text{ year} \times 9/12 = \$7,500$

Deferred income = $\$100,000 - \$7,500 = \mathbf{\$92,500}$

15. D

Both (iii) and (iv) increase the capital employed and reduce the ROCE.

(i) Will reduce the capital employed and therefore increase the ROCE.

(ii) The tax bill will have no impact on the profits before interest and tax and so does not reduce the ROCE.

16. D

On conversion to ordinary shares there will be an increase in equity and hence a decrease in gearing.

As the convertible instrument is no longer an issue there will be no interest costs and so the interest decreases causing the interest cover to increase.

17. B

B is a prepayment and does not meet the definition of a financial instrument.

18. D

19. D

Both (i) and (ii) are non-adjusting events.

20. C

A change to the revaluation model for PPE would cause the capital employed to increase. This would reduce the return on capital employed and reduce gearing.

Section B

Answer 1: Primrose

Tutorial Help and Key Points

This is quite a searching question. Take great care when dealing with purchase consideration — if only the cash payment has been recorded, the share exchange therefore needs to be. Watch the share exchange and don't get it the wrong way round; divide the number of shares acquired by 4 and multiply the result by 2 — these shares are in the parent. The deferred consideration needs to be discounted at 7% and by the year end this discount must be **unwound**.

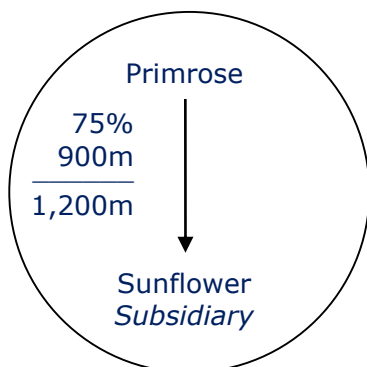
When dealing with the PUP don't forget that it is the unsold items that must be considered so take one third. Also note the 25 cents par value of the ordinary share capital.

Watch the seasonal-variation nature of the Associate's profits; also the figure given for Impairment of Associate must be taken in full, not group share, as the entire Associate value is being written down, not just its goodwill.

For Marking Guide see main answer

		(Marks)
(a) Valuation of Associate Agapanthus:	\$m	
Investment at cost	20	½
Group share of Associate's post-acqn Retained Earnings (30% × 6m)	1.8	1
Less: Impairment	(2.8)	½
Investment in Associate A (in CSFP)	<u>19</u>	<u>2</u>
(b) Goodwill in subsidiary Sunflower	\$m	
Investment in Sunflower:		
Cash consideration	180	½
Primrose shares (900/4 × 2 × 0.90c)	405	1
<i>Note: \$112.5m share capital / \$292.5m share premium</i>		
Deferred cash (900m × 17c = \$153m × 1/1.07 ie 0.9346)	143	1½
	<u>728</u>	
Therefore calculation of Goodwill in Sunflower:	\$m	
Investment at cost		
CI	728	
Fair value of NCI at acq'n given	177	½
Less: Fair value of net assets at acq'n	(566)	2
Goodwill at aquisition	339	
Less: goodwill impairment	(40)	½
Goodwill at net book value (in CSFP)	<u>299</u>	<u>6</u>
(c) Non-controlling interest	\$m	
Fair value of NCI at acq'n given	177	½
NCI % post acquisition reserves of sub (25% × 20m)	5	1
NCI % goodwill impairment (25% × 40)	(10)	½
NCI (CSFP)	<u>172</u>	<u>2</u>
(d) Consolidated reserves	\$m	
Primrose	450	½
Group share of S's post acquisition (75% × \$20m)	15	1
A's post acquisition (30% × \$6m)	1.8	1
Less: Group share of goodwill impairment in Sunflower	(30)	½
Impairment of Associate	(2.8)	½
Less: Discount unwound (\$143m × 7%)	(10)	1½
Total to CSFP	<u>424</u>	<u>5</u>

Working – Group structure



30% Associate Agapanthus acquired mid-year

Working – Consolidation Adjustments and Net assets

Per Q

Fair value adjustment for PP+E in S:

	\$m
Fair value adjustment at acquisition	90
Post-acquisition depreciation (90/18 yrs × 1 yr)	(5)
Fair value adjustment at consolidated SFP date	<u>85</u>

Unrealised profit adjustment:

1/3 of inventory left within the group at the year-end:

	\$m
Transfer price (\$12m × 1/3)	4
Cost (\$4m × 75%)	(3)
Unrealised profit	<u>1</u>

Dr Retained earnings - Sunflower (subsidiary is the seller)	\$1m
Cr Group inventory	\$1m

Elimination of current account (intra-group trading):


Cash in transit:

Dr Bank (C I T)	\$7m	
Cr Receivables (Sunflower)		\$7m

Elimination of current accounts:

Dr Payables (Primrose)	\$4m	
Cr Receivables (Sunflower)		\$4m

Net assets list

	Sunflower	
	At acq'n \$m	At CSFP \$m
Share capital	300	300
Retained earnings	180	210
PP+E (FV adj)	90	90
Post acq'n depreciation	-	(5)
Software (FV adj: given in (ii))	(4)	(8)
PUP adj	-	(1)
	566	586
	For G/W	
		
	Difference of \$20m to NCI and Consolidated Reserves	

Associate Agapanthus' \$18 million profits are seasonal and spread as \$12m pre-acquisition, \$6 million post-acquisition. It is the Group share (30%) of the **latter** portion (\$6 million) that must be used in valuing the Associate and increasing Consolidated Reserves.

Primrose Group's statement of financial position as at 30 November 2014

(shown here for tutorial purposes only)

	\$000
Non-current assets	
Property, plant and equipment ($960 + 510 + 90 - 5$ [W])	1,555
Intangible: Software (W)	40
Goodwill (W)	299
Investment in Associate (W)	19
	<u>1,913</u>
Current assets	
Inventory ($94 + 30 - 1$ [W])	123
Receivables ($126 + 66 - 7 - 4$ [W])	181
Bank ($\text{nil} + 6 + 7$ [W])	13
	<u>317</u>
Total assets	<u>2,230</u>
Equity and liabilities	
Equity	
Ordinary share capital ($450 + 112.5$ [W])	562.5
Share Premium (W)	292.5
Retained earnings (W)	424
	<u>1,279</u>
Non-controlling interest (W)	172
	<u>1,451</u>
Non-current liabilities	
10% loan notes ($180 + 30$)	210
Current liabilities	
Payables ($195 + 86 - 4$ [W])	277
Income taxes payable ($68 + 34$)	102
Deferred consideration (discount unwound)	153
Overdraft	37
	<u>569</u>
Total equity and liabilities	<u>2,230</u>

Answer 2: Jennie Mae

Tutorial Help and Key Points

This is a long question as is often the case in the exam. To speed up the process you must memorise the format for the statement of cash flow.

There are three sections:

- Depreciation must be added back to profit before tax as must loss and disposal, and interest expense – remember you are doing the opposite of what was done in the income statement, ie, negating the effect of the earlier treatment in the P & L.
- Next comes the working capital movements, always imagining that the movement is in cash and each movement being considered in isolation.
- Finally comes interest paid and tax paid.

Keep time to write the report in part (b) and as this is usually badly done by students, a reasonable attempt will earn you several marks.

Marking Guide

	Marks
(a)	
Statement of cash flows	
Profit before tax	½
Depreciation	1
Loss on disposal	½
Interest expense	½
Working capital movements	1½
Interest paid	½
Tax paid	1
Purchase of PP+E	1
Issue of share capital	½
Receipt of loan	½
Dividends paid	½
	8
(b)	
Up to 3 marks for ratio calculations	3
1 mark for each relevant point	
up to a max of	4
Total for question	7
	15

(a) Jennie Mae's statement of cash flows for the year ended 31 March 2015

	\$000	\$000
Cash flows from operating activities		
Profit before tax	1,750	
Adjustments for:		
Depreciation (W1)	9,375	
Loss on disposal (W1)	3,125	
Interest expense	750	
	<u>15,000</u>	
Increase in receivables (250 – 125)	(125)	
Increase in inventory (7,250 – 3,750)	(3,500)	
Increase in payables (7,750 – 5,375)	<u>2,375</u>	
Cash generated from operations	13,750	
Interest pd	(750)	
Taxation paid (1,125 + 625 – 550)	<u>(1,200)</u>	
Net cash from operating activities		11,800
Cash flows from investing activities		
Purchase of PP+E (W1)	<u>(26,250)</u>	
Net cash used in investing activities		(26,250)
Cash flows from financing activities		
Issued share capital (12,500 + 2,500 – 7,500)	7,500	
Receipt of loan (7,500 – 2,500)	5,000	
Dividends paid (4,750 + 1,125 – 4,375)	<u>(1,500)</u>	
Net cash from financing activities		<u>11,000</u>
Net decrease in cash and cash equivalents		(3,450)
Opening cash and cash equivalents		<u>1,125</u>
Closing cash and cash equivalents		<u>(2,325)</u>

Workings

W1 – PPE

Cost

Opening	23,750
Less: Disposals	<u>(7,500)</u>
Opening has become	16,250
But Closing is	<u>42,500</u>
Therefore additions = balancing figure	<u>26,250</u>

Accum Dep'n

Opening	7,500
Less: Disposals (7,500 – 3,125)	<u>(4,375)</u>
Opening has become	3,125
But Closing is	<u>12,500</u>
Therefore Dep'n charged for year =	<u>9,375</u>

Disposals

Cost	7,500
Less: Accumulated Dep'n	(4,375)
NBV	<u>3,125</u>
(Scrapped, therefore Loss on Disposal = NBV of 3,125)	

Or alternative presentation:

PPE Cost			
B/f	23,750	Disposals	7,500
Additions (Bal fig)	26,250	C/f	42,500
	<u>50,000</u>		<u>50,000</u>
PPE Accumulated dep'n			
Disposals (7,500 – 3,125)	4,375	B/f	7,500
C/f	12,500	Depreciation expense (Bal fig)	9,375
	<u>16,875</u>		<u>16,875</u>
PPE Disposals			
Cost	7,500	Accumulated depreciation	4,375
	<u>7,500</u>	Loss on disposal (Bal fig)	3,125
			<u>7,500</u>

(b) Introduction

This report investigates the overall financial performance and financial position of Jennie Mae with particular reference to the increase of sales revenue and reduced profitability from the financial period ended March 2014 to March 2015. An analysis of ratios calculated has been given as an appendix at the end of this report.

Financial performance

During the year to 31 March 2015 sales revenue had increased by 17%, this shows that the hiring of the supermodel to endorse the women's clothing line has had a positive impact. However, the gross profit margin has decreased from 19.9% in 2014 to 16.3% in 2015. This suggests that although volumes of clothing sold have possibly increased, the margins achieved on those sales may have decreased, suggesting discounts have been given to shift inventory on less popular lines of clothing.

Even with discounted prices, the inventory holding period has increased from 35 days to 55 days which is rather worrying because with such a fashionable and seasonal business like clothing, holding on to inventory for too long runs the risk of it becoming obsolete. It must be noted that because of this large increase in the number of days inventory being held, it is expected that large inventory write downs may be necessary in order to sell the inventory in the future.

The operating profit margin has decreased from 10.2% in 2014 to 4.3% in 2015 this is because of the operating expenses growing at a much faster rate (44.7%) than the sales revenue. This is extremely worrying as normally expenses are expected to decrease as a percentage of sales as economies of scale come into effect. This suggests poor cost control or some one-off expenses associated with the acquisition and refurbishment of stores.

The net profit margin has also fallen from 7.1% to 1.9% this is mainly due to the increase in finance costs, which were attributable to an increase in a long-term loan taken out in 2015 along with the increase in operating expenses, mentioned above.

The high level of investment and poor profitability has led to a decline in the return on capital employed from 33.9% to 9.3%. Hopefully this should improve in future years as the return on investment will improve with higher profits.

Conclusion

Although the 2015 results are disappointing in terms of performance in relation to the high level of investment there are a lot of positive things to take into the future for the company such as the high level of cash generated from operations which if continued into future periods could greatly reduce the finance costs and debts. Hopefully next year should see the profits improve with this year's capital expenditure, without the disruption caused by development.

Appendix

(additional ratios provided for tutorial purposes)

	2015	2014
Gross profit margin	16.3%	19.9%
Net profit margin	1.9%	7.1%
Return on capital employed	9.3%	33.9%
Gearing	28%	17%
Interest cover	3.3 times	25 times
Current ratio	0.71:1	0.77:1
Inventory days	55 days	35 days
Payables payment period	59 days	
Increase in sales revenue	17%	
Operating profit margin	4.3%	10.2%

Answer 3: Kasabian

Tutorial Help and Key Points

Learn the formats for published accounts and for the SOCIE.

Cost of sales must include carriage inwards, depreciation, etc.

The buildings revaluation is a loss and as it was at the year end, depreciation for the year must first be charged. The change in investment property value must be transferred to the P & L proper, and not shown in the other comprehensive income section.

Take care with calculating interest charge to P & L as this must be the **effective** rate of 6%.

Master the C.U.D. mnemonic for tax and remember that an over-provision is always a credit, and under-provision a debit.

Tax is always examined and the need to be able to write about deferred tax has been emphasised in recent articles in the student magazines.

Marking Guide

(a)

SPLOCI:

Revenue	1/2
Cost of sales	3
Investment income	1
Administration costs	1
Distribution costs	1
Finance costs	1
Taxation	1 1/2
	9

(b)

Statement of financial position:

Property, plant and equipment	3
Investment property	1
Inventory	1/2
Receivables	1/2
Ordinary share capital	1
Share premium	1
Retained earnings	1
Revaluation reserve	1
Debentures	1
Deferred tax	1
Trade payables	1/2
Current tax	1/2
Bank	1
	13

(c)

Statement in changes in equity:

Correct layout and presentation	1
Share issue (split between OSC and SP)	1
Revaluation loss	½
Profit for the year	½
	3

(d)

One mark for each reasonable point to a maximum of five	5
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Total for question

30

(a) Kasabian's statement of profit or loss and other comprehensive income for the year ended 31 March 2015

	\$000
Revenue	315,700
Cost of sales (W1)	(184,800)
Gross Profit	130,900
Investment income (3,850 + 3,710 [W3])	7,560
Distribution costs (W1)	(21,000)
Administration expenses (W1)	(23,625)
Operating profit	93,835
Finance costs (W4)	(4,155)
Profit before tax	89,680
Taxation (W5)	(32,000)
Profit for the year	<u>57,680</u>

(b) Kasabian's statement of financial position as at 31 March 2015

	\$000	\$000
<i>Non-current assets</i>		
Property, plant and equipment (W2)		356,300
Investment property (46,375 + 3,710 [W3])		<u>50,085</u>
		406,385
<i>Current assets</i>		
Inventory	66,325	
Receivables	<u>61,425</u>	
		<u>127,750</u>
<i>Total assets</i>		<u>534,135</u>
<i>Equity and liabilities</i>		
<i>Equity</i>		
Share capital (105,000 + 35,000 [W6])	140,000	
Share premium (W6)	7,000	
Revaluation reserve (24,500 - 7,000 [W2])	17,500	
Retained earnings (44,625 + 57,680)	<u>102,305</u>	
		266,805

Non-current liabilities

2% Loan notes (W4)	141,255	
Deferred tax (W5)	20,000	
	<u>161,255</u>	

Current liabilities

Payables	60,725	
Current tax (W5)	32,300	
Bank (11,550 + 1,500)	13,050	
	<u>106,075</u>	
<i>Total equity and liabilities</i>		<u>534,135</u>

(c) Kasabian's statement of changes in equity for the year ended 31 March 2015

	Share Capital \$000	Share Premium \$000	Revaluation Reserve \$000	Retained Earnings \$000	Total \$000
At 1 April 2014	105,000	-	24,500	44,625	174,125
Revaluation loss (W2)			(7,000)		(7,000)
Share issue (W6)	35,000	7,000			42,000
Profit for the year				57,680	57,680
At 31 March 2015	<u>140,000</u>	<u>7,000</u>	<u>17,500</u>	<u>102,305</u>	<u>266,805</u>

Workings**(W1) Costs**

	Cost of Sales \$000	Distribution Costs \$000	Admin Expenses \$000
Per trial balance		19,250	21,875
Opening inventory	33,100		
Carriage inwards	125		
Purchases	189,200		
Closing inventory	(66,325)		
Depreciation (W2)			
Buildings	3,500	1,750	1,750
Plant	25,200		
Total to income statement	<u>184,800</u>	<u>21,000</u>	<u>23,625</u>

(W2) PP+E

	Land \$000	Buildings \$000	Plant \$000	Total \$000
Valuation/Cost	52,500	175,000	224,000	451,500
Accumulated depreciation			(56,000)	(56,000)
Carrying value at 1 April 2014	<u>52,500</u>	<u>175,000</u>	<u>168,000</u>	<u>395,500</u>
Depreciation for the year				
Buildings (175,000/25 years)		(7,000)		(7,000)
Plant (168,000 × 15%)			(25,200)	(25,200)
CV prior to year-end revaluation	<u>52,500</u>	<u>168,000</u>	<u>142,800</u>	<u>363,300</u>
Revaluation loss (Bal. figure)		(7,000)		(7,000)
Carrying value at 31 March 2015	<u>52,500</u>	<u>161,000</u>	<u>142,800</u>	<u>356,300</u>

(W3) **Investment property**

	\$000
Fair value per trial balance	46,375
Gain on change in fair value (46,375 x 8%)	3,710
Fair value at 31 March 2015	<u>50,085</u>

Note: The gain on the increase in FV on investment property is recognised as income in the P & L per IAS 40.

(W4) **Finance costs**

The loan note is a financial liability, which is held to maturity, the standard states that issue costs must be deducted from the proceeds when initially measuring the liability.

	\$000	
Opening liability (net proceeds) at 1 October 2014 (140,000 – 1,500)	138,500	
Interest (6% × 6/12)	4,155	To I/S
Interest paid	(1,400)	
Closing liability at 31 March 2015	<u>141,255</u>	

(W5) **Taxation**

	\$000
<i>Taxation in the P & L:</i>	
Current Tax	32,300
Over provision	(700)
DT movement*	400
	<u>32,000</u>

	\$000
<i>Deferred tax in the statement of financial position:</i>	
At 1 April 2014	19,600
Movement (Bal fig)*	400
At 31 March 2015 (80,000 × 25%)	<u>20,000</u>

(W6) **Share issue**

No. of shares eligible for rights issue ($\$105,000/50c = 210,000/3 \times 1$)	<u>70,000</u>
Dr Suspense	\$42,000
Cr Share capital (70,000 × 50c)	\$35,000
Cr Share premium (70,000 × 10c)	\$7,000

(d) IAS 12 defines deferred tax liability as being the amount of income tax payable in future periods in respect of taxable temporary differences. Temporary differences are defined as being differences between the carrying amount of an asset (or liability) and its tax base, which the asset is valued at for tax purposes by the tax authority. Put simply, the temporary differences arise when income or expenditure is recognised in the financial statements in one year, but is charged or allowed for tax in another.

A classic example of a situation where deferred tax is required to be provided for is non-current assets. Deferred tax arises due to differences between depreciation charged to the financial statements and the tax depreciation (capital allowances) charged to taxable profits by the tax authorities.

The deferred tax usually arises as a result of the company receiving capital allowances that depreciate the asset at a faster rate for tax purposes than the rate of depreciation charged in the financial statements. This results in accounting profits being higher in the early years of the assets life than taxable profits, thus resulting in the actual tax charge being too low in comparison with the accounting profits. However, in the long-term these differences will even out over the life of the asset, so at some point in the future the accounting profits will be lower than the taxable profits therefore resulting in a higher tax charge in the future.

For example, if the profits of a company remain constant over several years, the resulting higher tax charge in future periods will distort the view of the financial statements, as it would appear that performance is deteriorating, when it is not necessarily the case. The company will not want to mislead investors who value companies based on post-tax profits, therefore a deferred tax adjustment is necessary. By recognising this future tax charge as a temporary difference, the tax expense will be comparable with the reported performance of the company.

The effect of the deferred tax in the statement of profit or loss and other comprehensive income would be the movement in the deferred tax liability being added or deducted to the current tax charge for the year. In the statement of financial position a deferred tax liability is created by calculating the difference between the carrying value of the asset and its tax base, this would give the temporary difference which would then have the appropriate tax rate applied to it.



ACCA

Paper F7

Financial Reporting

Revision Mock

Examination June 2017

Question Paper

Time Allowed	15 minutes	Reading and planning
	3 hours	Writing

All questions are compulsory and **MUST** be attempted

This paper is divided into two sections:

Section A: ALL TWENTY questions are compulsory and **MUST** be attempted.

Section B: ALL THREE questions are compulsory and **MUST** be attempted.

**Do NOT open this paper until instructed by the supervisor.
During reading and planning time only the question paper
may be annotated. You must NOT write in your answer
booklet until instructed by the supervisor.**

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Section A starts on page 4.

Section A – ALL TWENTY questions are compulsory and MUST be attempted.

Each question is worth 2 marks.

1. AB sells computer equipment with a two-year service agreement for a total of \$3,000 on 1 October 2014. The cost of providing the service guarantee is \$200 per annum and AB usually charges a 25% mark-up on cost when selling the service separately.

How much revenue should be recognised in the financial statements for the year ended 31 March 2015?

- A. \$2,500
- B. \$2,625
- C. \$2,750
- D. \$3,000

2. On 1 January 2015, an entity issued a debt instrument with a coupon rate of 3.5% at a par value of \$6,000,000. The directly attributable costs of issue were \$120,000. The debt instrument is repayable on 31 December 2021 at a premium of \$1,100,000.

What is the total amount of the finance cost associated with the debt instrument?

- A. \$1,470,000
- B. \$1,590,000
- C. \$2,570,000
- D. \$2,690,000

3. GD enters into a four-year operating lease of a motor vehicle at \$1,500 per annum payable at the end of the year. The lease commenced on 1 December 2014 when GD negotiated a one-year rent-free period.

Calculate the amounts to be recognised in the financial statements for the year ended 31 March 2015.

	Statement of financial position – accrual	Statement of profit or loss – expense
A.	\$1,125	\$1,125
B.	\$nil	\$nil
C.	\$500	\$500
D.	\$375	\$375

4. TD owns an investment property that cost \$500,000 on 1 April 2013. Its fair value on 31 March 2014 was \$600,000 and \$550,000 on 31 March 2015. TD uses the fair value model to account for its investment properties.

What amounts would appear in the financial statement for the year ended 31 March 2015?

	Statement of financial position – investment property	Statement of profit or loss
A.	\$550,000	\$50,000 loss
B.	\$600,000	\$100,000 gain
C.	\$550,000	\$50,000 gain
D.	\$600,000	\$100,000 loss

5. AM has a profit for the year ended 31 March 2015 of \$500,000 and there were \$100,000 10% irredeemable preference shares in issue during the year. AM had 400,000 equity shares in issue at 1 April 2014 and made a 1-for-2 bonus issue on 1 May 2014.

Calculate the basic EPS figure for the year ended 31 March 2015.

- A. 83.3 cents per share
 B. 62.5 cents per share
 C. 81.7 cents per share
 D. 61.3 cents per share
6. JR has a deferred tax liability at 31 March 2014 of \$175,000. At 31 March 2015 the carrying value of its assets and liabilities was \$800,000 and their tax base was \$700,000. The tax rate enacted at the year-end was 20%.

What is the effect on profit or loss for the year ended 31 March 2015?

- A. \$275,000 gain
 B. \$195,000 gain
 C. \$155,000 gain
 D. \$75,000 gain
7. TD acquired a 4% \$500,000 debenture at a discount of 5% on 1 April 2014, incurring directly attributable transaction costs of \$5,000. The effective rate of interest on the debenture is 7%.

What amounts should be shown in the statement of financial position of TD at 31 March 2015?

- A. \$482,900
 B. \$489,250
 C. \$513,250
 D. \$515,000

8. JD, a parent company, acquired AS, an unincorporated entity, for \$1.8 million. A fair value exercise was performed on AS's assets and liabilities and showed at the date of purchase:

	\$'000
Property, plant and equipment	3,000
Identifiable intangible asset	500
Inventory	300
Trade receivables less payables	200
	<u>4,000</u>

How should the purchase of AS be reflected in JD's consolidated statement of financial position?

- A. Record the net assets at their values shown above and credit profit or loss with \$2.2 million
 - B. Record the net assets at their values shown above and credit JD's consolidated goodwill with \$2.2 million
 - C. Write off the intangible asset (\$500,000), record the remaining net assets at their values shown above and credit profit or loss with \$1,700,000
 - D. Record the purchase as a financial asset investment at \$1.8 million
9. TK owns 100% of the share capital of the following companies. The directors are unsure whether the investments should be consolidated.

In which of the following circumstances would the investment not be consolidated?

- A. TK has decided to sell its investment in Omega as it is loss-making; the directors believe its exclusion from consolidation would assist users in predicting the group's future profits
- B. Kappa is a bank and its activity is so different from the engineering activities of the rest of the group that it would be meaningless to consolidate it
- C. Rho is located in a country where local accounting standards are compulsory and these are not compatible with IFRS used by the rest of the group
- D. Theta is located in a country where a military coup has taken place and TK has lost control of the investment for the foreseeable future

10. Which of the following are NOT examples of biological assets as per IAS 41 Agriculture?

- A. Trees in a plantation forest
- B. Plants for harvest
- C. Sheep, pigs and cattle
- D. Apples, lemons and pears

11. Which of the following would be classified (only) as a liability in the financial statements?

- A. A 5% debenture that is convertible at the option of the holder into ordinary equity shares at any point during the next five years
- B. The purchase of a redeemable bond that is redeemable in three years' time
- C. The issue of 6% loan notes that are redeemable in four years' time
- D. The issue of irredeemable preference shares

12. The role of which supervisory accountancy body is described as "to develop, in the public interest, a single set of high quality, understandable, enforceable and globally accepted financial reporting standards based upon clearly articulated principles"?

- A. IFRS Advisory Council
- B. IFRS Foundation
- C. IFRS Interpretations Committee
- D. IASB

13. NY began the construction of a children's centre on 1 July 2014. To finance the construction of the centre NY issued loan notes of 4% \$2,000,000 on 1 October 2014 redeemable in five years' time at a premium. The effective rate of interest on the loan notes is 5%.

In accordance with IAS 23 *Borrowing Costs* how much interest should be capitalised for the year ended 31 March 2015?

- A. \$40,000
- B. \$50,000
- C. \$60,000
- D. \$75,000

14. FC purchases an item of plant for \$500,000 on 1 July 2014 and receives a grant of \$100,000 against the purchase. The asset has a useful life of 10 years with no residual value. FC uses the deferred income method to account for government grants.

What amounts will appear in the statement of financial position for the year ended 31 March 2015?

- A. Plant \$450,000 and total deferred income of \$90,000
- B. Plant \$360,000 and deferred income of £92,500
- C. Plant \$462,500 and total deferred income of \$92,500
- D. Plant \$346,667 and deferred income of \$90,000

15. The Return on Capital Employed (ROCE) for VJ has reduced from 21.6% to 15.4% in the year to 31 March 2015.

Which of the following independent options would be a valid reason for this reduction?

- (i) Repayment of a long term loan
- (ii) A large tax bill accrued
- (iii) Major investment in intangible assets just before the reporting date
- (iv) An upwards revaluation of land in the year

- A.** (i) and (ii)
- B.** (i) and (iii)
- C.** (ii) and (iv)
- D.** (iii) and (iv)

16. OP has 3% convertible bonds in issue and they are due to be converted or redeemed within the next three months. Assume that no further debt is issued by OP in the year.

Which of the following statements are TRUE if all the holders choose to convert to ordinary shares in OP?

- (i) Interest costs will decrease and gearing will increase following conversion
- (ii) Gearing will decrease and earnings per share will increase if all of these instruments are converted
- (iii) Interest cover will increase and gearing will decrease following conversion
- (iv) The P/E ratio will increase or decrease depending on how the market reacts to the conversion to ordinary shares

- A.** (i), (ii) and (iv)
- B.** (ii), (iii) and (iv)
- C.** (i) and (ii)
- D.** (iii) and (iv)

17. Which of the following is not a financial instrument as per IAS 39?

- A.** The recording of an electricity expense at year-end for which the invoice has not yet been received
- B.** The correcting of a 15-month expense that has been recorded in the general ledger to ensure that only 12 months of expense are recorded in the period
- C.** The purchase of shares in an unlisted business
- D.** The issue of irredeemable preference shares

18. Which of the following would NOT give rise to a provision in the financial statements?

- A.** Contamination of land by an oil company where there is no current law to clean up but at year-end it is virtually certain that the law will be enacted shortly
- B.** A lease agreement that has been cancelled two years early but for which the lease payments still need to be made for the remaining two years
- C.** Warranty given for goods or services
- D.** A restructuring plan which a detailed formal plan but has not yet been implemented or communicated to employees

19. Which of the following items is NOT an example of a non-adjusting event?

- (i) The change in value of an investment after the reporting date
- (ii) The sale of property before the year-end that is conditional on planning permission being granted. Planning permission is granted after the reporting date and the sale is completed
- (iii) Discovery of a miscalculation of the depreciation charge for the financial year after the reporting date
- (iv) The sale of the inventory after the reporting date that gives evidence that the net realisable value is below its cost

- A.** (i) and (ii)
- B.** (ii) and (iv)
- C.** (i) and (iii)
- D.** (iii) and (iv)

20. LP has changed its accounting policy for its property during the year from one of historic cost to the revaluation model.

Which of the following would NOT be directly affected by the change in policy?

- (i) Return on capital employed
- (ii) Gearing
- (iii) Quick ratio
- (iv) Receivable days

- A.** (ii) and (iii)
- B.** (i) and (ii)
- C.** (iii) and (iv)
- D.** None of the above

Section B – ALL THREE questions are compulsory and MUST be attempted

1. Primrose, a public listed company, acquired 900 million ordinary shares in Sunflower on 1 December 2013. The purchase consideration is made up as follows:

An immediate cash payment of \$180 million

A share exchange of two shares in Primrose for four shares in Sunflower

A deferred cash payment of 17 cents per share acquired, payable on 1 December 2014

Primrose has only recorded the cash payment. The value of each share in Primrose and Sunflower at the date of acquisition was 90 cents and 59 cents respectively. The Primrose cost of capital is 7% per annum (present value factor 0.9346).

The statements of the financial position of the two companies at 30 November 2014 are shown below:

	Primrose		Sunflower	
	\$m	\$m	\$m	\$m
<i>Non-current assets</i>				
Property, plant and equipment		960		510
Intangible: Software		Nil		48
Investments				
In Sunflower		180		Nil
In Agapanthus		20		Nil
<i>Current assets</i>				
Inventory	94		30	
Trade receivables	126		66	
Bank	Nil		6	
		220		102
Total assets		1,380		660
<i>Equity and liabilities</i>				
<i>Equity</i>				
Equity shares of 25 cents each		450		300
Retained earnings				
1 Dec 2013	315		180	
year ended 30 Nov 2014	135		30	
		450		210
		900		510
<i>Non-current liabilities</i>				
10% loan notes		180		30
<i>Current liabilities</i>				
Trade payables	195		86	
Income taxes payable	68		34	
Operating overdraft	37		Nil	
		300		120
Total equity and liabilities		1,380		660

The following information is relevant:

- (i) On the 1 December 2013 the fair value of Sunflower's property, plant and equipment exceeded their carrying value by \$90 million. The property, plant and equipment had a remaining useful life of 18 years at this date.
- (ii) The software of Sunflower represents the amortised development cost of an integrated electronic reporting package. It requires a reduction of \$4 million at acquisition and a reduction of \$8 million at consolidation date (ie \$48 million less \$8 million, or \$40 million at consolidation).
- (iii) Sunflower sold goods to Primrose for \$12 million in the post-acquisition period. One third of these goods remain in inventory at 30 November 2014. Sunflower applies a 25% gross profit margin on all sales.
- (iv) Sunflower's trade receivables account balance includes \$11m due from Primrose at the year-end. However this does not agree with the current account balance included within Primrose's trade payables account due to cash-in-transit of \$7 million paid by Primrose.
- (v) Primrose bought 10 million shares in Agapanthus on 1 June 2014; this represents a holding of 30% of Agapanthus' equity. Agapanthus' profit is subject to seasonal variation. Its profit for the year ended 30 November 2014 is \$18 million; \$12 million was made from 1 December 2013 to 31 May 2014. Primrose uses equity accounting in its consolidated financial statements for its investment in Agapanthus.
- (vi) Goodwill is reviewed for impairment annually. At 30 November 2014 there had been an impairment loss of \$40 million in the value of consolidated goodwill since acquisition. Due to the difficult economic conditions as evidenced by falling profits, the value of the investment in Agapanthus was impaired by \$2.8 million.
- (vii) It is group policy to value the non-controlling interest at acquisition at full (or fair) value ($59¢ \times 300$ shares ie \$177 million).

Required:

Prepare figures to be shown in the consolidated statement of financial position of Primrose as at 30 November 2014 for

- (a) Valuation of Associate** (2 marks)
- (b) Goodwill in Subsidiary** (6 marks)
- (c) Non-controlling Interest** (2 marks)
- (d) Consolidated Reserves** (5 marks)

Provide full workings, but the preparation of the consolidated statement of financial position is not required.

(15 marks)

2. Jennie Mae, a public company, is a national clothing retailer that sells luxury designer clothing. The company has recently expanded its operations and commissioned a famous supermodel to endorse its women's clothing line. This has led to increased sales, however; overall profits of the company are down.

The managing director of the company has expressed her extreme disappointment with the current year's results and would like an explanation as to why these increased sales has not led to increased profitability.

Details of Jennie Mae's financial statements for the two years to 31 March 2015 are shown below.

Statements of profit or loss and other comprehensive income for the year ended:

	31 March 2015 \$000	31 March 2014 \$000
Revenue	57,500	49,000
Cost of sales	(48,125)	(39,250)
Gross profit	9,375	9,750
Operating expenses	(6,875)	(4,750)
Operating profit	2,500	5,000
Interest expense	(750)	(200)
Profit before tax	1,750	4,800
Taxation expense	(625)	(1,300)
Profit for the year	1,125	3,500

Statements of financial position as at:

	31 March 2015		31 March 2014	
	\$000	\$000	\$000	\$000
<i>Non-current assets</i>				
Property, plant and equipment (note i)		30,000		16,250
<i>Current assets</i>				
Inventory	7,250		3,750	
Trade receivables	250		125	
Bank	Nil		1,125	
		<u>7,500</u>		<u>5,000</u>
<i>Total assets</i>		<u>37,500</u>		<u>21,250</u>
<i>Equity and liabilities</i>				
<i>Equity</i>				
Ordinary share capital (\$1)	12,500		7,500	
Share premium	2,500		Nil	
Retained Earnings	4,375		4,750	
		<u>19,375</u>		<u>12,250</u>
<i>Non-current liabilities</i>				
Long-term loans		7,500		2,500
<i>Current liabilities</i>				
Bank overdraft	2,325		Nil	
Trade payables	7,750		5,375	
Income tax payable	550		1,125	
		<u>10,625</u>		<u>6,500</u>
<i>Total equity and liabilities</i>		<u>37,500</u>		<u>21,250</u>

The following information is relevant:

- (i) Property, plant and equipment can be analysed as follows:

	2015	2014
	\$000	\$000
Cost	42,500	23,750
Accumulated depreciation	(12,500)	(7,500)
Carrying amount	<u>30,000</u>	<u>16,250</u>

The increase in property, plant and equipment was due to the acquisition of six new stores in the London area and the refurbishment of existing stores in the regions. Because of the refurbishment, some fixtures and fittings were scrapped which has a book value of \$3.125 million and had originally cost \$7.5 million. These fixtures had no scrap value.

- (ii) Dividends paid by the company to ordinary shareholders were \$1.5 million in both 2014 and 2015. The directors have signalled their intention to maintain the annual dividend at \$1.5 million for the foreseeable future.
- (iii) The following ratios have been calculated for 2014:

Gross profit margin	19.9%
Operating profit margin	10.2%
Net profit margin	7.1%
Return on capital employed	33.9%
Gearing	17.0%
Interest cover	25 times

Required:

- (a) **Prepare the statement of cash flow for Jennie Mae for the year ended 31 March 2015 using the indirect method.** (8 marks)
- (b) **Provide a brief explanation of financial performance to the managing director.** (7 marks)

(15 marks)

3. The following trial balance relates to Kasabian, a listed company, at 31 March 2015.

	\$000	\$000
Ordinary shares 50 cents each		105,000
Retained earnings at 1 April 2014		44,625
Revaluation reserve (from land and buildings)		24,500
2% Loan Note 2018		140,000
Revenue		315,700
Investment properties at valuation 1 April 2014	46,375	
Land and buildings at valuation 1 April 2014	227,500	
Plant at cost 1 April 2014	224,000	
Plant - accumulated depreciation 1 April 2014		56,000
Distribution costs	19,250	
Administration expenses	21,875	
Inventory at 1 April 2014	33,100	
Debenture interest paid	1,400	
Income tax		700
Carriage inwards	125	
Investment income		3,850
Purchases	189,200	
Trade receivables	61,425	
Trade payables		60,725
Bank		11,550
Deferred tax		19,600
Suspense account		42,000
	824,250	824,250

The following information is relevant:

- (i) The 2% Loan Note was issued on 1 October 2014 under terms that provide for a large premium upon redemption in 2018. The finance department has calculated that the effective interest rate of this type of debt instrument is 6% per annum. Kasabian also paid in cash issue costs of \$1.5 million; these have yet to be accounted for. Kasabian intends to hold these loan notes to maturity.
- (ii) Kasabian has a policy of revaluing its land and buildings to their fair value at each year-end. The valuation of land and buildings includes a land element of \$52.5 million. On 31 March 2015 a professional valuer valued the buildings at \$161 million with no change to the value of land. The estimated remaining life of buildings at 1 April 2014 was 25 years. Depreciation is charged 50% to cost of sales, 25% to distribution costs and 25% to administration expenses.
- (iii) Later, the valuers informed Kasabian that investment property of the type Kasabian owned had increased in value by 8% in the year to 31 March 2015.
- (iv) Plant is depreciated at a rate of 15% per annum using the reducing balance method and charged to cost of sales.
- (v) The directors of Kasabian have estimated the income tax liability for the year ended 31 March 2015 at \$32.3 million. The balance of the income tax account in the trial balance represents under/over provision of the previous year's estimate. At 31 March 2015 there were \$80 million of taxable temporary differences due to capital allowances exceeding depreciation. The applicable tax rate is 25%.

- (vi) The suspense account in the trial balance represents the credit entry for the proceeds of a one for three rights issue of ordinary shares made on 1 February 2015. The issue was for 60 cents per share. The issue was fully subscribed.
- (vii) Inventory on 31 March 2015 was \$66,325,000.

Required:

Prepare for Kasabian

- (a) a statement of profit or loss and other comprehensive income statement for the year ended 31 March 2015;** (9 marks)
- (b) a statement of financial position as at that date; and** (13 marks)
- (c) a statement of changes in equity for the year ended 31 March 2015.** (3 marks)
- (d)** You have been asked to also prepare a memo for one of the non-executive directors of your company. The director is not familiar with accounting, and would like to know more. He is particularly confused by deferred taxation in the financial statements, because he has never heard of any such tax.

Required:

Prepare a brief memo for the non-executive director, and in it explain the purpose of deferred taxation, and the main accounting requirements of IAS 12 *Income Taxes* for deferred tax. (5 marks)

(30 marks)



ACCA

Paper F8

Audit and Assurance

Revision Mock Examination

June 2017

Answer Guide

Health Warning!

How to pass

Attempt the examination under exam conditions BEFORE looking at these suggested answers. Then constructively compare your answer, identifying the points you made well and identifying those not so well made.

How to fail

Simply read or audit the answers congratulating yourself that you would have answered the questions as per the suggested answers.

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Section A

Question	Answer	See Note
1.	B	1
2.	B	2
3.	C	3
4.	D	4
5.	A	5
6.	A	6
7.	D	7
8.	B	8
9.	D	9
10.	A	10
11.	B	11
12.	C	12

Notes:

1. Answer A is a substantive test and C is a test of control.
2. Option 3 implies the company is not a going concern as it is about to lose most of its revenues. Option 2 is a going concern threat, but there is enough cash to pay off the loans if this is demanded by the lender, so the company could survive. Item 4 represents an understated provision equating to 6% PBT which is material, whereas item 1 is a 4% PBT error and not material.
3. Contingent fees are banned because there are no safeguards that could reduce the threat enough. In A and D, safeguards could reduce the threats (e.g. careful staff selection, use of staff from another office of the firm, hot reviews). Option B is not a major threat because a marketing manager plays no role in preparing accounting records or the financial statements.
4. The other 2 options are audit software.
5. For P or L items, the assertions are completeness, occurrence, cut-off, classification and accurate values. Existence and rights & obligations relate to the statement of financial position.

6. Tests of control involve checking the system. Substantive tests check the info in the FS is correct. The tests are therefore the wrong way round.
7. Option 2 is describing stratification not extrapolation. Haphazard sampling is dangerous as without a clear method of selection it would be easy for audit staff to introduce bias into the selection.
8. Auditors should TRY to detect all material fraud – by assessing the risk of ALL material misstatement (whether fraud or error) and designing responses to these risks. Auditors cannot be required to find all fraud, because most of it is committed by directors and senior management, who are powerful enough to be able to hide their activities.
9. It is the Opinion that is unmodified – the Report IS modified (the addition of the extra paragraph is the modification). Option 1 is describing an Other Matter paragraph.
10. To reduce detection risk, either sampling risk must be reduced (e.g. a bigger sample size, which is unlikely if materiality is increasing) or non-sampling risk must be reduced (which would be achieved with better quality audit staff). More substantive testing would achieve the first of these. Risk of material misstatement is the combination of inherent and control risk. If this is now considered higher than first thought, the only solution is reducing detection risk. Auditors cannot reduce control risk – this is a risk for the client to address, not the auditor.
11. This is an adjusting event per IAS 10, because it provided evidence (before the directors signed the FS) that a customer balance due at the year end, would not be recoverable. Hence, the balance should be written off. The auditor would need to check it was corrected, but must then extend audit work and issue a new report on/after the date that the corrected FS are signed by the directors. This is largely because the IAS 10 period for EARP will now run up to the new set of FS being signed, meaning more adjustable or disclosable events might have taken place.
12. The law requires A to be reported, and public interest suggests B should also be reported. Item C is company strategy and as such would be likely to cause them commercial damage if reported.

Section B

MARKING GUIDE

In all questions, there is up to 1 mark for each valid point if it is in a sentence and clearly stated/explained.

Any point made which is correct but unclear or lacking sufficient detail, ½ mark.

Answer 1

TUTOR TIPS

In part a, remember to explain the threats not just state them. As is often the case, getting enough to pass is not difficult as there are more than four there, so if you can select those that you can explain in more detail. Also of course, ensure you can suggest safeguards for the four you select.

In part b, there are only 2 marks so only 2 benefits are needed. Note, it is BENEFITS not ROLES, so you are looking to state advantages not just what an audit committee does.

(a)

(i) Ethical threats

Long Association

The firm has been auditing the client for 6 years, with the same partner in place for the entire period. There is a risk that the firm, and the partner in particular, are too familiar with this client and might therefore have lost the ability to be sceptical (i.e. would trust the client too much). This could lead to Financial Statement errors going unchecked.

Tax Hearing

An advocacy threat is created if the audit firm attend the tax hearing in support of the client. The firm would be seen as @on the side@ of the client in arguing for no more tax to be paid – and if seen as supporting the client in this situation, might also be seen as on the client's side when auditing the financial statements, and therefore potentially ignoring errors to help the directors.

Ex-Audit Staff Joining Client

A familiarity threat is created because audit staff will recognise the FD of the client, given they used to work with him until recently. They might choose not

to audit as thoroughly as they should (i.e. have lost some professional scepticism) if they feel they know their ex colleague. As a result, errors made by the new FD might go unnoticed by the audit staff.

A self-interest threat might also have arisen. If the firm's ex-employee knew in advance that he was going to join the client, he might have avoided finding errors when doing audit work in the past, for fear of losing the job offer.

New Software

A self review threat is created if our firm proposes the new software for the client, as the audit staff would be checking the output of a system we recommended. As such, staff might be reluctant to report any mistakes caused by the software, leading to errors staying in the financial statements.

Also a management threat is created, because directors should be making the decision about the software. If our firm recommends the software to use, shareholders might believe that the gap between the auditors and the directors is too small, and might therefore question the auditors' independence.

Discounted Services

Accepting half-price services from a client creates a self-interest threat. The trainees are at risk of ignoring mistakes in the financial statements in order to keep the client happy and retain their cheap lessons. Whilst no values are given, it seems that the lessons have been going on for some time, and for younger members of staff the value is likely to be significant.

(ii) Reducing These Threats

Long Association

The partner should be rotated off this audit as soon as possible and replaced with another partner who has not had any recent involvement with this client.

Any other staff who have worked on this audit for at least 5 years should also be rotated off and replaced as soon as is feasible.

Tax Hearing

It would be best to politely decline the request to attend the hearing and to explain the reasons why to the client.

Ex Audit Staff joining Client

This is likely to be an extremely difficult issue to resolve (note – one of the reasons why audit firms usually stop senior staff joining a client). If the audit firm has other offices and can send an audit team from there, so that they do not know the FD, this would help.

Given the problem, a hot review by an independent partner would also appear wise, but in reality it might be better to consider resignation.

New Software

The audit firm could advise on software, but should not recommend a specific product. The final decision must rest with the client's management, but the audit firm could suggest criteria on which the software decision could be made, for example.

Discounted Services

The staff involved are relatively junior, which reduces the threat (as junior staff have relatively little impact on the audit report), but it would be best to use different trainees on this year's audit.

It might also be wise to remind all trainees that accepting gifts and hospitality from clients is not allowable if the value might be seen as anything but modest, and that any future offers of discounts should be agreed by the engagement partner before being accepted.

(b) Benefits of Audit Committees

An audit committee should be formed of independent non-executive directors. As such, it would help to increase the independence of both internal and external auditors, as they would be able to report concerns to senior independent people, rather than the executives (whose work they are auditing).

The audit committee also acts as an oversight on the quality of both internal and external audit processes, meaning action can be taken to improve either/both if necessary.

Since the audit committee members should have recent, relevant finance experience, the committee also acts as a useful source of consultation and guidance for the board in accounting matters.

Audit committees oversee financial reporting, internal controls and risk management, so all three of these should improve over time with a committee dedicated to them.

Answer 2

TUTOR TIPS

In a, knowledge is being tested. No application to the story needed as the answer is straight out of a textbook.

In b, the benefits of internal audit need to be tailored to the scenario. Think of the usual reasons why a company would benefit from internal audit (textbook) and then look in the story to see which of these issues are relevant to the company – which seem to be all of them!

(a) Reliance on Management's Expert

The client has done the valuations. If the auditor wants to use these valuations as audit evidence, the reliability of the client's valuations needs to be assessed by:

- Assessing whether the valuer has any professional qualifications relevant to the valuation of buildings, and if they do, verifying the qualifications are valid
- Checking the valuer's past experience in valuing buildings. For example, by seeing if they have valued in previous years and assessing how accurate these valuations turned out to be
- Deciding how much the clear lack of independence is likely to affect the valuations. There is no need to assess the independence of a director – by definition they are not independent – but the auditor should assess whether the director has an incentive not to value the buildings accurately (e.g. a bonus tied to the value of assets)

If the above issues are considered a problem, the auditor might need to get their own external independent expert to perform valuations instead.

(b) Benefits of Internal Audit

As the company is due to have a Listing, they are likely to need to follow corporate governance guidance. Most codes of corporate governance recommend internal audit, so establishing an internal audit function would help in complying with this.

Having an internal audit function will also help in giving a good impression of the company, implying that they take controls seriously. This should help in attracting investors.

The company has grown recently. As companies grow the directors find it harder to manage as they cannot know everything that is happening. Having internal audit will help to provide assurance to the directors that systems are operating effectively.

The company is not just larger, it has diversified into new areas. This will also stretch the ability of the directors to manage the business, providing another reason for internal audit to be in place.

One of the jobs that internal audit can do is to investigate frauds. The company has experienced three frauds recently suggesting there are problems in control systems, so one of the first jobs a new internal audit team could do is to identify the causes of these incidents and seek to stop them happening again.

Of course, the very existence of a new internal audit department would help to act as a deterrent to future frauds, sending a message to staff that management are taking action.

Falling profit margins suggest that the company might be becoming inefficient, perhaps due to growth meaning systems are out of date. Internal auditors perform value for money audits, and efficiency is one of the aspects assessed in such work, meaning internal audit might be able to highlight where the inefficiency is happening and be able to recommend how to resolve it.

The company has an audit committee and one of its roles is to oversee control systems. This would be a much easier task if there is an internal audit department to assess and test controls and report findings back to the committee.

Answer 3

TUTOR TIPS

Another mix of knowledge and application in this question. ISA 402 is the subject of part a, and this standard is not tested often making it difficult. However, it is only worth 2 marks, so if you cannot remember the issues with outsourcing, good exam technique tells you not to panic and to move on to the much easier (and more regularly tested) part b.

Part b has very few marks for each scenario given that accounting issues, materiality and audit tests are needed. The answer below provides several examples of audit tests but your answer only needs 2 tests, given the other 2 marks will be needed for the other parts of the requirement. For audit tests, the easiest approach is to simply check every fact/date/number in each story.

(a) Outsourcing

When clients outsource something which has relevance to the financial statements it causes auditors a problem in terms of access to evidence.

In order to perform substantive tests, the auditor will need to ensure the client has either got all paperwork back from the payroll company, or can arrange for the audit staff to visit the payroll company to inspect the documentation.

A bigger problem relates to controls. Controls over payroll need to be assessed, but the controls that affect the accuracy of payroll are mostly the controls at the payroll company, not at the audit client. Assessing the payroll company's controls will be difficult, as the auditor has no access to this company.

The auditor might be able to get an opinion on the payroll company's controls by asking for a report on this from the payroll company's own auditors, as they should have assessed the controls as part of their own audit. Ideally the auditors need an opinion on the effectiveness of the controls, not just a description of the system.

(b) GWC

The fire is an Event After the Reporting Period (EARP) covered by IAS 10. The fire does not provide evidence of the condition of assets at the year end – the assets were fine at this point – so is a non-adjusting event.

Given the damage represents in excess of 40% of profit, it is clearly material and likely to be seen as significant enough to require disclosure. Even if insurance covers the cost, damage to a company's HQ would be likely to disrupt the business and shareholders ought to be told.

Procedures to test this event will include:

- Inspecting the fire service report to verify the scale of the damage and hence to assess whether the cost appears realistic

- If the site remains damaged (the fire was over a month ago so repairs might have been completed), an inspection of the site to assess the scale of damage and likely impact on the business's operations
- Inspecting a copy of the insurance claim to verify it has been made, and the amount
- A review of correspondence with the insurance company to assess the likelihood of the claim being paid
- Inspection of the insurance policy to assess the likelihood of the damage being covered
- Inspection of the asset register from just before the date of the fire to verify the assets that were on site when the fire happened, to help assess whether the \$1.4m estimate is realistic
- Getting a written management representation to confirm the estimate of damage is their best estimate

OFS

The announcement before the year-end of the reconstruction is likely to be considered a constructive obligation, as it creates the belief amongst staff, shareholders etc that the reconstruction will probably take place. As such, IAS 37 requires that a provision is put into the financial statements.

The estimated cost of \$800,000 represents 18% of profit and is therefore material.

Procedures would include:

- Inspecting board minutes to verify that the decision has been taken, and that the cost figure given appears to be correct.
- Inspecting a copy of the announcement to verify it happened before the year end, and that the details announced are the same as the board decision
- Getting a breakdown of the \$800,000 cost to ensure it adds up, and that all of the likely costs (e.g. redundancies) seem to have been included
- Reviewing progress of the reconstruction post year end to measure actual costs against the estimate – given the dates in the question, the work may well have almost been finished by the time the audit finishes.

Answer 4

TUTOR TIPS

In a, there are only 3 modifications to an audit opinion (although one of them, the “except for”, can arise for 2 different reasons).

In b, the link between Going Concern issues and the audit report is tested. No technique here, it is simply something you are expected to know – but for impact on audit report describe the changes, don’t just say “adverse” or similar.

(a) Modified Opinions

Adverse

If there are material misstatements that impact many balances in the financial statements (“pervasive”), the auditor will give an adverse opinion stating that the financial statements do not give a true and fair view.

Disclaimer

If there is a lack of evidence that impacts many balances in the financial statements (“pervasive”), the auditor will issue a disclaimer of opinion, stating that “we do not give an opinion”.

Qualified Opinion

If there is a material misstatement, or a lack of evidence, which is material but only affects a small proportion of the balances and disclosures in the financial statements (i.e. it is not pervasive), the auditor can highlight the problems and then state that “except for” these issues, the financial statements give a true and fair view.

(b)

(i)

This would seem to represent a material threat to the company’s going concern position. Relying on a single customer is a dangerous business strategy at any time, but with the customer considering cancelling the contract there is a clear risk that shareholders need to be aware of, and the matter should be disclosed in line with IAS 1.

If this disclosure note is not included in the financial statements, the company would be in breach of IAS 1 meaning the audit opinion needs to be modified.

Assuming the auditors agree that the contract is more likely to be renewed than cancelled, and that the company is a going concern, all of the figures in the financial statements are true and fair – it is just one missing disclosure note. As such, an “except for” qualified opinion would seem the most likely result.

In this case, the lack of disclosure would be described in the “Basis” paragraph above the opinion section.

(Note – the auditor might decide that the missing disclosure note is so important that an adverse opinion could be used, but this is a less likely answer given that none of the numbers in the FS are wrong).

(ii)

If the auditors think the company is not a going concern, then the financial statements have been prepared under the wrong basis – they should have been prepared under a “break up” basis. This would make the problem pervasive, as a lot of balances would now be wrong. Assets will need to be written down in value, and a lot of new liabilities are likely to arise.

As such, an adverse opinion would be needed, stating that the financial statements do not give a true and fair view.

A description of the problem would need to be given in the Basis paragraph above the opinion.

Answer 5

TUTOR TIPS

Part a of this question is a typical audit risk and response question. The key here is to remember that the risks must be explained in audit risk terms – as either a material misstatement, or a detection risk (definitely NOT as a business risk). Responses to risk will depend on what the risk is of course, but will include substantive tests to check for individual misstatements, increased substantive testing in general for areas where control risk is high etc.

Part a is presented below in text – a 2 column approach could also work well.

Part b is a regularly tested area and students should be comfortable coming up with tests, using tried and tested techniques such as AEIOU and DADA3 for ideas. But, specific assertions are mentioned so take care to only test these – any tests for ownership or existence will score nothing. And explain the reason for each test.

Part c is another standard type of F8 question, asking for an ISA to be explained for 5 marks. Students should ensure they are prepared to be able to do this for any of the ISAs on the syllabus.

(a) Audit Risk and Response

The audit is a recent appointment. As such detection risk is increased because the audit firm will not have as much knowledge and understanding of the client as they will have in future years, meaning a greater risk that misstatements go unnoticed.

To reduce this risk, it would be wise to assign more experienced staff to this audit in the first year, preferably those with experience of similar companies being audited.

Under IAS 38, development costs should be capitalised as intangible assets if the projects are likely to be completed, and assuming the new products are likely to sell. Intangible assets are at risk of overstatement because the \$245,000 spent on the now cancelled project should be in expenses.

Also, the new development is at an early stage of design, meaning any costs incurred should also probably be in expenses not intangible assets.

To respond to this risk, the audit staff will need to verify that the project is indeed cancelled, by confirmation from the directors and inspecting board minutes.

The extension of the warranty to 6 months means there is a risk that the provision will be understated. IAS 37 requires a provision for the expected cost, and this will surely have risen given there is twice as long for customers to be able to return products. If it is calculated under the prior year assumptions, it will be understated.

To respond to this, the auditors should compare the provision with the prior year to assess if an adjustment has been made to reflect the 6 month period.

Several risks are created because of the new loan. Under IFRS 7, several matters need disclosure, including repayment terms, interest rate, the nature of the security provided etc. and there is a risk of under-disclosure as a result.

Also, the loan was mid year so there is a risk that the interest for 6 months has been miscalculated, or has not been accrued at all.

The loan might also have been mis-classified between short term and long term liabilities.

To respond to the above, the audit staff will inspect the loan agreement to confirm all relevant terms and conditions, and can then recalculate the interest and verify disclosures in the financial statements.

The company will have WIP at its year end. WIP requires someone with expertise to assess the level of completion and there is a risk that the company and the auditors do not have the expertise to get this right. Given it is an estimate, there is also a risk of deliberate manipulation of the level of completion.

The most likely response to this will be for an expert to be hired to assist with the audit work on WIP.

Being a manufacturer, the cost of finished goods will include production costs and overheads. There is a risk that the labour costs are out of date, given that wages would normally rise over a 6 year period, and the standard costs have not been changed for that amount of time.

The audit response will be to compare current actual labour costs with the standards to see how out of date they are, and if necessary to propose an amendment to management.

(b) Substantive Tests

Completeness

- Select a sample of assets seen in use on the company premises and inspect asset register to verify they are included
- Review repairs and maintenance accounts and obtain invoices for larger items to identify whether the item is a genuine repair, or might be considered an improvement (and hence, an asset)

Valuation

- For a sample of new assets, inspect purchase invoices to verify cost has been correctly recorded in the asset register, including all costs that brought the asset to its condition and location for use
- Compare depreciation policies in use with those in use by similar companies (e.g. by inspecting their published financial statements accounting policies disclosures)
- For a sample of assets, recalculate the depreciation charge for the year, ensuring it has been done in line with the policies disclosed in the financial statements
- If any assets are held at valuation, inspect valuation report to verify valuation was recent, and to agree the amount

- Assess the qualifications, experience and independence of whoever carried out these valuations, to assess the reliability of their conclusions
- Inspect the general ledger to verify that any revaluation surpluses have been taken to separate reserve, not to profit

(c) Laws and Regulations

Responsibility for understanding laws and regulations for a company rests mostly with those charged with the governance of that company – the directors and management.

However, the external auditors have a responsibility to check whether the financial statements are free from material misstatement, and if a company is breaching laws and regulations it is likely to have accounting implications.

Any breach of a reasonably important law or regulation, caused before the year end, is likely to mean a provision is required (IAS 37) for the fines that would be the likely outcome. If the breach is a matter of subjectivity, a contingent liability disclosure might be a more suitable accounting solution.

Any large breach of laws or regulations could result in such severe punishment that the company's going concern status could come under threat. Such threats must be disclosed in the financial statements as per IAS 1. If the breach is very severe (or there are new rule changes that the company might find it impossible to comply with), the company might not even be a going concern, meaning its financial statements would need to be produced under the alternative break-up basis.

In addition to understanding the laws and regs enough to be able to identify the risks of misstatement caused by the above points, the auditors also have a duty to report any breaches they find. In the first instance this should be to management, and if serious, or if there is a concern that management are breaching rules on purpose, it should also be reported to the audit committee.

In some cases, external reporting (e.g. to the industry regulator) might be necessary. Legal advice might be needed if this is considered a possibility.

Answer 6

TUTOR TIPS

Part a is a standard report on control deficiencies, but take care to note that the third part requires tests of control. Control tests are done by an auditor to see if the recommended improvements (the middle column of the answer) are working. Control tests should come from AEIOU, but would normally be EIO (enquiry, observation, inspection), perhaps using test data to assist.

There are way more deficiencies in the story than you need for the answer, so choose the 5 that you can suggest a recommendation for, and recommend a control for which there is an obvious control test.

For part b, there are several ISAs that require auditors to communicate with those charged with governance – in fact the vast majority of ISAs require this, so think through the various ISAs for ideas.

(a) Points for inclusion in a report to management

Deficiency	Recommendation	Test of Control
Some orders are placed by telephone, meaning there is a risk that the details do not get recorded properly and the wrong items arrive, disrupting business.	Where urgent orders need to be placed, they could be sent by email with a follow up telephone call to ensure the supplier is aware of the urgency, and a formal order form then sent.	Pick a sample of GRNs and check back to the purchase order to verify that there is a written order for everyone.
The purchasing clerk seems to do almost everything, meaning almost zero segregation of duties. They could easily be making mistakes that do not get noticed, or ordering things for their own personal use, or creating fake suppliers and diverting money to themselves.	The clerk is clearly very busy, suggesting that at the very least their job role should be divided up between 2-3 staff. One person should start a transaction, but someone else (more senior) should authorise it and someone else should then record it. If having several staff is not viable due to cost, a director should at least approve new suppliers and agree payments.	Inspect supplier files for evidence that a manager has authorised new suppliers being taken on (e.g. by seeing a signature on a new supplier form). Ask client to confirm that the clerk's roles have been divided up, and check HR records to confirm new employees have been recruited.
There is no review of existing suppliers, unless one goes bust. The company	A review of suppliers used should be carried out on an annual basis, with quality of	Inspect supplier files to verify there is documentation showing

might be missing out on better quality suppliers if it never chooses to look at alternatives.

service being discussed with the suppliers.

that such a review has taken place.

There are no checks on quality of goods arriving, only quantities. There is a risk that poor quality goods are received, resulting in the company's products being poor quality and customers becoming upset.

The warehouse staff, or internal quality staff, should perform checks on a sample of goods arriving, before they are accepted into inventory.

Observe goods arriving to verify that quality checks are now taking place.

When goods arrive overnight they are left outside the warehouse, creating a clear risk of theft or damage.

The company should instruct all suppliers that deliveries can only be accepted within specific time slots, and should refuse to pay for any supplies unless a member of staff signed for them when they were delivered.

Inspect communication with suppliers to verify that this instruction has been sent. Inspect GRNs to verify they were signed on all occasions.

The manager only reviews totals, and only on a monthly basis. Given the large amount of tasks the clerk does, their work needs more supervision than this in order to stop them making mistakes or committing fraud.

The manager should review this on a weekly basis and without the detail being aggregated into totals.

Inspect a copy of each week's purchases listing to verify a management signature.

There is no review of the purchasing budget, which (like most things) is under control of the clerk. Inefficiencies, mistakes, and fake suppliers will not be spotted if nobody reviews the clerk's work.

Either the budget should be reviewed by the manager before any purchase orders are placed, or the manager should construct the budget themselves, to exert more control over the work of the clerk.

Inspect the budgets to verify some involvement by the manager.

There is no reconciliation of supplier statements. If mistakes are being made by the clerk (or the supplier) they will not be picked up, leading to the potential for the company to be spending money it does not need to spend.

The manager should perform monthly reconciliations of supplier statements to the purchase ledger account balances, investigating any differences they find.

Inspect copies of the reconciliations to verify they are done, and inspect signatures (or enquire to verify it was the manager who did the reconciliation and investigation).

(b) Communication with Those Charged With Governance

At the appointment stage, threats to objectivity and conflicts of interest should be discussed with those charged with governance (TCWG), including the proposed safeguards of the audit firm, to allow TCWG to decide if the safeguards are sufficient.

At the planning stage, audit risks, materiality and audit strategy should be discussed, as the audit committee might have valuable input (especially on risk matters).

Any indications that the company is breaching laws and regulations (ISA 250) or is suffering from potential fraud (ISA 240) should be communicated to TCWG so that they can take the necessary steps to deal with these important matters.

If the auditor has problems gathering evidence, this should be communicated, so that the audit committee can try to assist in getting this evidence to be made available.

All material misstatements, whether corrected or as yet uncorrected, should be disclosed to the audit committee. This allows them to judge the activities of the Finance Director in preparing the financial statements.

At the finalisation stage, significant subsequent events, issues with the unaudited other information, and going concern threats should all be communicated, as these are all material issues that could cause problems in completing the audit process.

The proposed audit report must be communicated to management and the audit committee. Especially if there is a modification, TCWG would need to understand clearly why the auditors have reached their conclusions.

In a more general sense, anything that affects the smooth running of the audit process should be communicated, so that it can be addressed and improved upon in future audits.



ACCA

Paper F8

Audit and Assurance

Revision Mock Examination

June 2017

Time allowed

Reading and planning:

15 minutes

Writing:

3 hours

This paper is divided into two sections:

Section A – ALL TWELVE questions are compulsory and **MUST** be attempted

Section B – ALL SIX questions are compulsory and **MUST** be attempted

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

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Section A – ALL TWELVE questions are compulsory and MUST be attempted

1. Which of the following audit procedures is a correct description of a walk through test?

- A.** Selecting a purchase invoice from the sales day book to verify the amounts agree back to the invoice, goods dispatch note and purchase order
- B.** Following a sales order through the client's system to help understand how the order is received and how it turns into a delivery
- C.** Selecting a Goods Despatch Note to verify a signature is present showing it was checked back to the sales order before goods were despatched

(1 mark)

2. Your audit client Cecil Co has a draft profit before tax of \$5m. The audit team have raised the following issues as a result of their audit work:

- 1.** One line of inventory that cost \$200,000 is now obsolete, but the items remain in the financial statements at cost
- 2.** The company has breached its loan covenants. The loans total \$3.5m and the company has \$3.7m in cash
- 3.** One product makes up 76% of the company's revenue. A change in legislation means that this product will become illegal to sell worldwide from July 2015
- 4.** A court case brought by an unhappy ex-employee is disclosed as a contingent liability, mentioning a possible payout of \$150,000. The audit team believe a payout of \$300,000 is a better estimate, and that a payout is likely.

In terms of materiality, what is the correct order of importance of the above items (starting with the most important)?

- A.** 2, 3, 1 and 4
- B.** 3, 2, 4 and 1
- C.** 3, 2, 1 and 4
- D.** 2, 3, 4 and 1

(2 marks)

3. Your audit firm has been approached by a potential new audit client. After some discussion, they have invited you to become auditor of their financial statements.

Which of the following issues would make it impossible to accept their invitation?

- A. The company's ex Finance Director, who left eight months ago, works as a partner at your audit firm
- B. One of your audit firm's ex employees is the marketing manager at the company
- C. The company insists that the audit is done on a contingent fee basis
- D. You also audit this company's main competitor

(2 marks)

4. Auditors often used computer assisted audit techniques (CAATs) during the audit process. The main types of CAAT are test data and audit software.

Which TWO of the following are test data?

- 1. Using a computer program to select all items with a particular characteristic
- 2. Placing a sales order to see if a customer's computerized credit limit can be breached
- 3. Trying to set up a new employee on the client's payroll system using the payroll clerk's password
- 4. Calculating a client's receivables days on a customer by customer basis

- A. 1 and 4
- B. 3 and 4
- C. 1 and 2
- D. 2 and 3

(2 marks)

5. **Which TWO of the following are financial statement assertions relevant to Profit or Loss items?**

- 1. Cut-Off
- 2. Rights and Obligations
- 3. Existence
- 4. Completeness

- A. 1 and 4
- B. 1 and 2
- C. 2 and 3
- D. 1 and 3

(2 marks)

6. Auditors gather evidence using tests of controls and substantive procedures.

Which of the following statements, if any, is/are correct?

1. An auditor checking that the total of sales ledger balances equals the trade receivables balance in the statement of financial position, is a test of control
 2. Attending a client's inventory count and observing the client's staff counting, is a substantive procedure
-
- A. Neither 1 nor 2
 - B. Both 1 and 2
 - C. 1 only
 - D. 2 only

(2 marks)

7. **Which of the following statements about audit sampling are correct?**

1. To comply with audit standards, every item in a population must have a chance of being selected in the sample
 2. Extrapolation involves dividing a population into sections (e.g. by age, or by size of balance)
 3. Haphazard sampling is a reliable method for selecting items
 4. Sampling risk is the risk that a sample is not representative of the population from which it is drawn
-
- A. 1 and 3
 - B. 2 and 4
 - C. 2 and 3
 - D. 1 and 4

(2 marks)

8. **In respect of an external auditor's responsibilities relating to fraud at a client, is the following statement true or false?**

The external auditor should detect all material fraud.

- A. True
- B. False

(1 mark)

9. Sometimes an auditor is required to use an emphasis of matter paragraph in an audit report.

Which TWO of the following are correct in relation to an Emphasis of Matter Paragraph in the Auditor's Report?

1. It is used if there is an inconsistency between the unaudited information in the Annual Report and the audited financial statements
2. It constitutes an unmodified audit opinion
3. The audit report is referred to as an unmodified report
4. It should normally be placed below the Opinion section of the audit report

- A. 1 and 2
- B. 3 and 4
- C. 1 and 3
- D. 2 and 4

(2 marks)

10. An auditor has assessed that the risk of material misstatement at a client is higher than first thought.

How should the auditor amend the audit plan to resolve this issue?

- A. Carry out more substantive testing
- B. Decrease the control risk
- C. Carry out more tests of control

(1 mark)

- 11.** The audit of Moo Co's financial statements for the year ended 31 December 2015 has been completed; the audit report and the financial statements were signed in late January 2016 but are not yet issued to shareholders.

One week after the audit report and financial statements were signed, the finance director of Moo Co informed the engagement partner that he had just discovered that a customer had gone out of business in January 2016 owing the company a material amount. The balance had been owed since October 2015 and none of it will be recovered.

Which of the following actions, if any, should the auditor now take as part of their responsibilities under ISA 560 *Subsequent Events*?

- A.** No actions required as the audit report and financial statements have already been signed
- B.** Request management to adjust the financial statements by writing off the balance, verify the adjustment is made correctly, and then provide a new audit report
- C.** Request management to make disclosure of this event in the financial statements
- D.** Request management to adjust the financial statements by writing off the balance, verify the adjustment is made correctly, and if correct the original audit report does not need to be replaced

(2 marks)

- 12.** Auditors of financial statements should keep all client information confidential in most situations, but some exceptions exist.

In which of the following situations should the auditor NOT breach confidentiality?

- A.** There is evidence to suggest the client is involved in a terrorist act
- B.** The client is selling products likely to harm its customers
- C.** The client is planning the takeover of its only competitor

(1 mark)

Section B – ALL SIX questions are compulsory and MUST be attempted

- 1.** You are an audit manager at Pinnacle & Co and you are planning the audit of Boomerang Co (Boomerang), a company that runs courses teaching people in water sports, including surfing and diving. Your firm has audited Boomerang for the past six years.

The directors of Boomerang are under investigation by the tax authorities and have to attend a hearing next month. They have asked the engagement partner, Chris Chan, to attend the hearing to speak on behalf of the company. They have pointed out that as Mr. Chan has been engagement partner for six years, he is well placed to support the company's argument that they have not underpaid any taxes.

During the year, an audit manager who had worked on last year's audit of Boomerang left Pinnacle & Co to become the company's Finance Director. Shortly after starting in this new role, he decided that Boomerang needed new accounting software and has asked your firm to recommend the software they should buy.

Two of the audit trainees from last year's audit team were offered half-price surfing lessons, which they accepted. Both of them are still having the lessons, and have asked to be included in this year's audit team.

Required:

(a) Using the information above:

- (i) Explain FOUR ethical threats which may affect the independence of your firm in respect of the audit of Boomerang; and**

(4 marks)

- (ii) For each threat explain how it might be reduced to an acceptable level.**

(4 marks)

(b) Explain the benefits for a company of having an audit committee.

(2 marks)

(10 marks)

2.

- (a) You have an audit client which has numerous properties. The client's accounting policy is to revalue its properties and one of the directors has performed the valuations this year. Your firm is considering placing reliance on these valuations as part of its audit evidence.

Required:

Explain what your Firm must do if it wants to place reliance on the valuations.

(4 marks)

- (b) Finlayson Co is one of your audit clients. They are planning a listing on their country's stock exchange within the next year as they have grown rapidly. They have also diversified operations into several new products and markets.

During the past six months, three members of staff have been sacked and reported to police after being caught committing fraud. They only got caught because a member of staff who was suspicious reported the matter to management.

Whilst the company has been growing, profit margins have started to fall. The directors are concerned about inefficiency creeping in because of the size of the company. The company has recently established an audit committee, but has no internal audit function.

Required:

Explain why an internal audit department might be of benefit to Finlayson Co.

(6 marks)

(10 marks)

3.

- (a)** Your firm audits the financial statements of Merlion Co, a company with a large number of employees. The directors of Merlion Co are considering outsourcing their payroll function to a local specialist firm called Payroll Plus Co, and have asked what impact this might have on your audit process.

Required:

Explain the impact this outsourcing decision would have on your audit of the financial statements of Merlion Co.

(2 marks)

- (b)** You are currently reviewing the audit files for several of your clients for which the audit fieldwork is complete. The audit seniors have raised the following issues:

GWC Co.

GWC Co has a year end of December 31st 2015. The draft financial statements show a profit of \$3.4m. On January 26th 2016 the company's headquarters were severely damaged by a fire. Damage has been estimated at \$1.4m, and an insurance claim was submitted on February 4th 2016.

OFS Co.

OFS Co has a year end of December 31st 2015 and the financial statements show a profit of \$4.4m. In a board meeting three weeks before the year end the directors decided that a major company reconstruction was needed and they announced this to staff and shareholders on the following day. The reconstruction was expected to take three months and to cost approximately \$800,000, and work began on this in mid January 2016.

Required:

For each of the scenarios above:

- (i) Discuss the accounting issues and assess the materiality of the situation;** (4 marks)
- (ii) Suggest further audit procedures that should now be performed to help the audit team come to a conclusion on the correct accounting treatment.**

(4 marks)

(10 marks)

4.

- (a) Describe THREE ways in which the audit opinion can be modified within an audit report on a set of financial statements.**

(3 marks)

- (b)** MBS Co is an audit client of your firm. The company supplies fruit and vegetables to a major national supermarket chain. One of the terms of the deal is that they are not allowed to supply any other companies, so the supermarket chain is their only customer. The supermarket chain has told MBS Co that their annual contract, due for renewal shortly after the end of your audit, is at risk of not being renewed.

The directors believe that the contract will probably not be lost, and that even if it was not renewed they would be able to find other customers quickly to replace the supermarket chain. Having assessed the situation, the audit team agrees with the directors.

The above matter is not reflected in the financial statements of MBS Co.

Required:

- (i) Describe the accounting amendment needed to the financial statements of MBS Co and the impact on the audit report if this amendment is not made.** (4 marks)
- (ii) If the audit firm changes its mind and decides that MBS Co is not a going concern, and there are no adjustments to the financial statements, explain the impact on the audit report.** (3 marks)

(10 marks)

5. Your firm has recently been appointed as the auditor of the financial statements of Gusto Co, a company which designs, develops and manufactures bicycles. The company has existed for over 60 years and has made profits consistently over this period. The market for bicycles is relatively stable, with older models continuing to sell for many years even when newer models are introduced.

The company's year-end is March 31st 2016 and you have been asked to help with the audit planning.

In September 2015 the company started development work on a new model of bicycle, and so far has capitalized development costs of \$245,000 for this project. Recent market research results have suggested that the model will not sell as well as previously thought, and the board decided last week to scrap the project. A totally different new model is in the early stages of design and development work will begin in June 2016.

Historically, all of the company's bicycles were sold with a 3 month warranty covering basic repair costs. From December 2015, the company has extended this to cover 6 months on all new sales.

The company took out a secured loan of \$1m at an interest rate of 4% on October 1st 2015. The loan is repayable in full on October 1st 2018.

Much of the production process, especially in the final stages, is labour intensive. At any point in time the company has significant work in progress and labour costs form a significant part of the production cost. Finished bicycles are valued at standard cost. The standard costs were set in 2009 and are due for review next year.

Required:

- (a) From the above information, explain FIVE audit risks that arise and describe the auditor's responses to these risks, in planning the audit of Gusto Co. (10 marks)
- (b) Describe FIVE substantive audit tests that you would plan to carry out to test the completeness and valuation of the company's property, plant and equipment. (5 marks)
- (c) Explain the auditor's responsibilities in relation to the laws and regulations that Gusto Co. are required to follow. (5 marks)
- (20 marks)**

6. You are the auditor of Canton Co., a manufacturer of household appliances such as kettles, toasters and microwave ovens, and have been provided with the following description of the purchasing system.

Purchase Ordering and Receipt of Goods

The majority of purchase orders are done in writing, but when parts are needed urgently the orders are sometimes done by telephone. The company uses a large number of suppliers, many of whom have supplied the company for many years, and one purchasing clerk places all of the orders. During the last year two suppliers closed down, but the purchasing clerk quickly found two replacement companies to supply the necessary parts. The clerk agreed prices and other terms and deliveries have already started to arrive. Unless a supplier goes out of business, the companies who supply Canton Co. are never changed or reviewed.

When goods arrive the quantities are checked back to the original order by the purchasing clerk and then the goods are booked into the warehouse. The purchase clerk signs the goods received note to evidence that the delivery was checked to the order. Orders sometimes arrive overnight when no company staff are present, and suppliers unload the items outside the warehouse gate for the staff to deal with in the morning when they arrive at work.

A purchasing manager reviews total purchasing figures on a monthly basis and compares them to the purchasing budget produced by the purchasing clerk. The manager does not review the budget when the clerk prepares it each year.

Invoicing

When suppliers send invoices, the purchasing clerk checks the details back to the orders to verify prices are as expected and then transfers the money to the supplier at the month end. All suppliers send monthly statements to the company but the purchasing clerk just places them on the supplier files, as he is too busy to do anything else with them.

Required:

(a) In respect of the purchasing system of Canton Co:

- (i) Describe and explain FIVE deficiencies;**
- (ii) Recommend a control to address each of these deficiencies; and**
- (iii) Describe a test of control your audit firm would perform to assess if each of these controls is operating effectively.**

Note: The total marks will be split equally between each part

(15 marks)

- #### **(b) Other than control deficiencies, describe FIVE other matters that external auditors should communicate with those charged with governance at a client.**

(5 marks)

(20 marks)

End of Question Paper



ACCA

Paper F9

Performance Management

Revision Mock

June 2017

Answer Guide

Health Warning!

How to pass

Attempt the examination under exam conditions BEFORE looking at these suggested answers. Then constructively compare your answer, identifying the points you made well and identifying those not so well made.

If you got basic definitions and rules wrong: re-revise by re-writing them out until you get them correct.

How to fail

Simply read or audit the answers congratulating yourself that you would have answered the questions as per the suggested answers.

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Section A

Marking scheme: 2 marks each

1. **B**

$$(1 + N) = (1 + R) \times (1 + I)$$

$$R = (1.18 / 1.06) - 1 = 11.32\%$$

2. **C**

$$\text{Initial outlay} = PV/PI = 50/2 = \text{\$25 million}$$

$$\text{IRR to perpetuity} = (\text{Annual cash flows}/\text{Initial outlay}) \times 100\%$$

$$= (10/25) \times 100\% = \textbf{40\%}$$

3. **A**

4. **D**

Account receivable =	2/12 × 240,000 =	\$40,000
Inventory =	3/12 × 120,000 =	\$30,000
Current assets		\$70,000
Current liability =	70,000/1.4 =	\$50,000

5. **B**

Statement (i) is true and Statement (ii) is false. The profitability index should only be used to rank projects where the projects are divisible.

6. **A**

$$\text{EOQ} = \sqrt{(2 \times 25,000 \times 10)/2} = 500 \text{ units}$$

Total cost at EOQ		\$
Purchase cost	25,000 × £4	100,000
Total ordering cost	10 × 25,000/500	500
Total holding cost	2 × 500/2	500
Total cost		101,000

7. **D**

$$\text{Expected return} = 4\% + 1.5(9\% - 4\%) = 11.5\%$$

$$\text{Predicted share value} = 30/0.115 = 261 \text{ cents}$$

8. **B**

9. **C**

10. **A**

11. **A**

$$\text{Dividend per share} = \text{EPS} \times \text{Dividend pay-out ratio} = 25\text{p} \times 0.60 = 15 \text{ cents}$$

$$\text{Share price} = \text{EPS} \times \text{P/E ratio} = 25\text{p} \times 20 = 500 \text{ cents}$$

$$\text{Dividend yield} = (\text{DPS}/\text{MV of share}) \times 100\% = (15/500) \times 100\% = 3.0\%$$

12. **A**

Original share	(4 × \$6.00)	24.00
Rights share	$\frac{(1}{5} \times \$6.00 \times 0.60)$	<u>3.60</u>
		27.60
Ex-rights price (\$27.60/5)		<u>5.52</u>

Value of rights per original share \$6.00 – \$5.52 = \$0.48

13. **B**

The first statement is correct. However, futures contracts are standardised.

14. **D**

Statement (i) is incorrect. An invoice discounter has no contact with the client's customers. Statement (ii) is incorrect. A bank bill is one that is accepted on a customer's behalf. It is a trade bill that may be discounted. Statements (iii) and (iv) are correct.

15. **A**

The question asked for the effect on cost of EQUITY.

16. **D**

Profit after tax = 20 m × \$1.00 (i.e. 5 × \$0.20) = \$20 m

	\$m
Net profit before interest and taxation (6x)	30.0
Less interest (x)	<u>5.0</u>
Net profit before taxation (Y) = (5x)	25.0
Less taxation (0.2Y)	<u>5.0</u>
Net profit after taxation (0.8Y)	<u>20.0</u>

17. **C**

The company is selling euros and so the higher three months forward rate applies.

Hence:

Sterling receipts = 200,000/1.4897 = £134,255

18. **D**

The cost of loan capital is: $10\% (6.0/8.0) \times (1 - 0.20) = 6\%$

WACC is calculated as follows:

$$12\% = [(8/20) \times 6\%] + [(12/20) \times X\%]$$

$$0.6X = 9.6\%$$

$$X = 16\%$$

19. **C**

The first statement is incorrect. It reflects the residual view of dividends. The second statement is correct.

20. **D**

Financial gearing increases the risk of share price and earnings per share volatility as well as loan default.

Section B

Answer 1

Tutorial Help and Key Points

- Analyse the financial statements for the symptoms of overtrading.
- This should include calculation of some ratios such as inventory turnover period, receivable and payable turnover period, and liquidity ratios.
- Calculate percentage increase in sales, inventory, receivables, and payables.
- Discuss whether the company shows signs of overtrading, relating your discussion with the ratios and percentages calculated.

Marking Guide

Financial analysis
Discussion of overtrading
Conclusion

Marks

4–5

4–5

1

Max 10

Financial analysis

Turnover 2014	$1.278 \times \$4.5 \text{ million}$	$= \$5.751 \text{ million}$
Cost of sales 2014	$40\% \times \$5.751 \text{ million}$	$= \$2.3004$
Turnover/Revenue increase (Given)		$= 27.8\%$
Non-current assets increase	$4,325/3,775$	$= 14.6\%$
Inventory increase	$575/475$	$= 21\%$
Receivable increase	$950/550$	$= 72.7\%$
Payable increase	$625/450$	$= 38.9\%$

		2014		2013
Current ratio	1,625/1,050	1.55	1,275/450	2.83
Quick ratio	(1,625 – 575)/1,050	1.00	(1,275 – 475)/450	1.78
Inventory turnover period	(575/2,300) × 365	91 days	(475/1,750) × 365	99 days
Receivables turnover period	(950/5,751) × 365	60 days	(550/4,500) × 365	45 day
Payables turnover period	(625/2,300) × 365	99 days	(450/1,750) × 365	94 days
Revenue to working capital	5,751/(1,625 – 1,050)	10 times	4,500/(1,275 – 450)	5.5 times
Revenue to non-current assets	5,751/4,325	1.3 times	4,500/3,775	1.2 times

Discussion

Overtrading is the term applied to a company which rapidly increases its turnover without having sufficient capital backing, hence the alternative term “under-capitalisation”. It arises when a company has too small a capital base to support its level of business activities.

Overtrading is often associated with rapid increase in turnover and Aston Co has experienced rapid increase in revenue of 27.8% in a growing market while cost of sales is also up by 31.4%. There is also a sharp increase in revenue to non-current asset ratio from 1.19 to 1.33 times, and revenue to net current assets from 5.5 to 10 times. Output increases are obtained by more intensive utilisation of existing non-current assets, and growth tends to be financed by more intensive use of working capital.

In overtrading situation the current ratio and quick ratio decreases and the current ratio and quick ratios have decreased from 2.83 to 1.55 and 1.78 to 1.00 respectively.

Overtrading could be indicated by increase in inventory days. However, the inventory days fell from 99 to 91 days.

In overtrading situation the entity increases its reliance on short-term sources of finance such as overdraft and accounts payable. The payable days increased from 94 to 99 days indicating the entity's inability to pay its suppliers early. The entity's cash position fell by £150,000 and overdraft increased from 0 to £425,000 indicating over reliance on short-term finance.

Overtrading could also be indicated by deterioration in receivable days. Receivable has increased by 72.7% compared to increase in revenue of 27.8%, much explained by the increase in receivable days from 45 to 60 days showing that the increased in revenue may have been achieved through provision of generous credit facilities given to customers.

In conclusion, Aston Co is exhibiting the signs of overtrading, but the evidence can be more clearly shown if industry average figures are available as benchmark.

Tutorial Help and Key Points

Part (a)

- WACC can be used as the discount factor to appraise a project if it reflects the systematic business and financial risk of that project.
- Discuss business risk, financial risk and the size of the project as the reasons to justify the usage of WACC.

Part (b)

- Use company A and B as the proxy companies.
- Un-gear the beta of company A and B using their respective debt/equity proportions.
- Calculate the average un-gear/asset beta for the industry as the sum the two asset betas and divide by two.
- Re-gear the average asset/ungeared beta using the debt/equity proportion of DVA.
- Calculated the project specific cost of equity using the CAPM formula provided on the formula sheet.

Marking Guide

Part (a)

	Marks
Discussion of business risk	2
Discussion of financial risk	2
Discussion of size of project	1

Max 5 marks

Part (b)

Un-gear/asset beta: company A	1
Un-gear/asset beta: company B	1
Average un-gear/asset beta	1
Re-gear/asset beta	1
Project specific cost of equity	1

Max 5 marks

- (a) The cost of capital to be used as the discount factor to appraise a project should reflect the systematic business and financial risk of that project.

Business risk

WACC can be used in investment appraisal provided that the business risk of the proposed investment is similar to the business risk of existing operations. Essentially this means that WACC can be used to evaluate an expansion of existing business.

As DAV is evaluating a new investment in an unrelated industry an area in which it has not previously been involved the business risk of the investment project will be different from the business risk of existing operations and therefore the current WACC will not be appropriate as it will not incorporate this additional business risk, hence a project specific discount rate that reflects the business risk of the new investment project should be used.

Financial risk

WACC can be used in investment appraisal provided that the financial risk of the proposed investment is similar to the financial risk of existing operations. This means that financing for the project should be raised in proportions that broadly preserve the capital structure of the investing company.

Size of project

WACC can also be used in investment appraisal if the size of the proposed investment is small in relation to the size of the company. If the project is large relative to the size of the company then this will cause a change in the perceived risk of the company, making the existing WACC inappropriate to be used as a discount factor.

(b) Un-gear (asset) beta:

$$A = 1.3 \times (90/(90 + 10 \times 0.7)) = 1.21$$

$$B = 1.4 \times (80/(80 + 20 \times 0.7)) = 1.19$$

$$\text{Average asset beta} = 1.21 + 1.19/2 = 1.2$$

Re-gear the asset beta to reflect the debt equity proportion of the company;

$$1.2 = B_g \times (60/60 + 40 \times 0.7)$$

$$B_g = 1.76$$

$$K_e = 6\% + 1.76(4\%) = 13.04\%$$

Answer 3

Tutorial Help and Key Points

Part (a)

- Discuss at least four attractions of convertible debt as compared to straight debt like bank loans and loan notes.
- Remember that tax savings on interest is applicable to both convertible and straight debt and should not be discussed.

Part (b)

- Calculate conversion value as the market price of ordinary shares in five years' time multiply by the conversion ratio of 20 shares.
- Market value is the present value of the interest and conversion value using the cost of debt as the discount factor.
- Floor value is the present value of interest and redemption value using the cost of debt as the discount factor.
- Conversion value is the difference between the market value of the convertible debt and the current conversion value (current market share price \times conversion ratio shares of 20).

Marking Guide

Part (a)

1 mark for each correct point discussed up to a maximum of 4 marks

Marks
4 marks

Part (b)

Conversion value
Market value
Floor value
Conversion premium

1
2
2
1

Max 6 marks

- (a) Convertible securities are fixed return securities (usually debentures and preference shares), that has the right to be converted into ordinary share at the option of the holder within a pre-determined period at a pre-determined rate. Once converted, they cannot be converted back into the original fixed return security.

Convertible securities are fixed return securities (usually debentures and preference shares), that has the right to be converted into ordinary share at the option of the holder within a pre-determined period at a pre-determined rate. Once converted, they cannot be converted back into the original fixed return security.

- Convertible security is much cheaper than equity finance and ordinary debt. The interest rate on convertible debt will be lower than the interest rate on ordinary debt such as a bank loan because of the value of the option to convert.
- Liquidity position is preserved if conditions are favourable and the debt is converted into shares. If the debt is converted into ordinary shares, it will not need to be redeemed, i.e. self-liquidation has occurred. A bank loan of a similar maturity will need to have all of the capital repaid.
- Gearing will increase with a bank loan for the time that the debt is outstanding, and gearing will then return to its previous level when the bank loan has been paid off. Gearing also increases when convertible debt is issued, but if conversion occurs, the gearing will fall not only because the debt has been removed, but will fall even further because equity has replaced the debt.
- Fewer restrictive covenants/conditions on the issue of convertibles debt than on ordinary debt.
- It is a back door of issuing shares when share prices are depressed. It may be possible to issue convertible debt even when ordinary debt such as a bank loan is not attractive to lenders, since the option to convert offers a little extra that ordinary debt does not. This is the option to convert in the future, which can be attractive to optimists, even when the short- and medium-term economic outlook may be poor.

(b)

(i) Market value

Expected share price in five years' time = $5.35 \times 1.05^5 = \$6.83$

Conversion value = $\$6.83 \times 20 = \137 .

	Year	Cash flow	DF (7%)	PV (£)
Interest	1-5	8	4.100	32.80
Conversion value	5	137	0.713	97.68
				<u>130.48</u>

(ii) Floor value

	Year	Cash flow	DF (7%)	PV (£)
Interest	1-5	8	4.1	32.80
Redemption value	5	100	0.713	71.3
				<u>104.10</u>

(iii) Conversion premium

Market value of convertible debt	= 130.48
Conversion value at date of issue = $(\$5.35 \times 20)$	<u>= 107.00</u>
	= 23.48

Conversion premium per share = $23.48/20 = \$1.174$ per share

Answer 4

Tutorial Help and Key Points

Part (a)

- NPV should be calculated as the present value of future relevant cash flows (discounted using the appropriate cost of capital) less the initial investment.
- The \$4.5 including the consultancy fee is sunk as it has already been incurred and as such is irrelevant to cash flow. It should be ignored.
- Depreciation of \$1.5 is irrelevant cash flow as it does not involve movement of cash.
- Tax is payable one year in arrears. Capital allowances are on reducing balance basis.
- Working capital should be included in year zero and recovered in year four.
- Comment on the financial acceptability of the project.

Part (b)

- Explain at least 3 reasons for soft capital rationing.
- Explain at least 3 reasons for hard capital rationing.

Marking Guide

Part (a)

	Marks
Sales	1
Variable cost	1
Fixed cost	1
Tax	2
Tax saved on capital allowances	3
Residual value	1
Working capital recovery	1
NPV	1
Comment	1

Max 10 marks

Part (b)

Soft capital rationing	2-3
Hard capital rationing	2-3

Max 5 marks

(a)

Years	0	1	2	3	4	5
	\$000	\$000	\$000	\$000	\$000	\$000
Sales		15,750	22,750	18,000	10,000	
Variable cost		2,700	3,900	3,600	2,400	
Fixed cost (7.6 - 1.5)		6,100	6,100	6,100	6,100	
		6,950	12,750	8,300	1,500	
Tax (30%)			(2,085)	(3,825)	(2,490)	(450)
Tax saved on capital allowances			638	478	359	475
Plant and equipment	(8,500)					
Residual value					2,000	
Working capital	(1,200)	0	0	0	1,200	0
Net cash flows	(9,700)	6,950	11,303	4,953	2,569	25
DF (12%)	1	0.893	0.797	0.712	0.636	0.567
Present values	(9,700)	6206	9008	3527	1634	14

Net present value (\$000)

\$10,689

Since the NPV is positive the project should be undertaken.

Workings

Sales

Year	1	2	3	4
Sales units (000)	450	650	600	400
Selling price	35	35	30	25
Sales (\$000)	15,750	22,750	18,000	10,000

Variable costs

Year	1	2	3	4
Sales units (000)	450	650	600	400
Variable cost per unit	6	6	6	6
Total variable cost	2,700	3,900	3,600	2,400

Tax savings on capital allowances

Year 1:	$\$8,500 \times 25\% \times 30\%$	=	638
Year 2:	$638 \times 75\%$	=	478
Year 3:	$478 \times 75\%$	=	359
Year 4:	difference	=	475
	Total benefits $(8,500 - 2,000) \times 30\%$	=	<u>1,950</u>

- (b) Capital rationing occurs whenever there is a budget ceiling or a market constraint on the amount of funds which can be invested during a specific period of time. It is a situation where there are insufficient funds to finance all projects with positive net present value.

There are two causes of capital rationing:

Soft or internal capital rationing

Soft capital rationing is often used to refer to situation where, for various reasons, the firm internally imposes a budget ceiling on the amount of capital expenditure.

It occurs due to internal factors such as:

- Management may be reluctant to issue additional share capital because of the concern that this may lead to a dilution in control
- Management may be unwilling to issue share capital if it will lead to a dilution in earnings per share.
- Management may not want to raise additional debt capital because they do not want to be committed to large fixed interest payment or due to the concern of gearing.
- There may be a desire within the company to limit investment to a level that can be financed solely from retained earnings.

Hard or external capital rationing

Hard capital rationing occurs whenever there is a market constraint on the amount of funds which can be invested during a specific period of time.

This occurs due to external factors such as:

- Credit crunch
- Raising money through the stock market is not possible because share prices are depressed.
- There may be restriction on bank lending due to government controls
- Lending institutions may consider an organisation to be too risky to be granted further loan facility
- The cost associated with making small issues of capital may be too great

Answer 5

Tutorial Help and Key Points

Part (a)

TERP should be calculated as the weighted average of the cum-rights market value and the proceeds from the rights issue.

The proceeds from the rights issue should be calculated as:

- The difference between the amount required and the bank loan,
- Converted into dollars using the spot exchange rate.

The number of shares issued in the rights issue will be calculated as:

- Proceeds from the rights issue divided by the rights issue price.

Part (b)

(i)

The effect of the UK investment on the earnings per share of TRA Co can be evaluated by comparing:

- the earnings per share before (current) and
- after (revised) the UK investment.

Earnings per share is calculated as the earnings divided by the number of shares.

The earnings after the UK investment is the sum of the earnings from the American operations and that of the UK operations.

The earnings of the UK operations should be calculated as:

- the operating profit, less interest on the loan, converted at the exchange rate on 30th September 2013 and less American tax.
- The exchange rate at 30th September 2013 should be estimated using the purchasing power parity theory, using the given inflation rates of the two countries.

The revised earnings per share will then be calculated as:

- the revised earnings divided by the revised number of shares (current number of shares plus rights issue shares).

(ii)

The effect of the UK investment on the wealth of the shareholders of TRA Co can be evaluated by comparing:

- share price after the rights issue (TERP) and market price after (revised) the UK investment.
- Market price can be calculated as the price earnings ratio multiplied by the earnings per share.
- Given the current market price and current earnings per share calculated, calculate the current price earnings ratio.
- Assuming that the price earnings ratio remains constant, the revised share price should be calculated as the revised earnings per share multiplied by current price earnings ratio.

Comment on your findings. If the market price after the UK investment is higher than the TERP, then the UK investment is acceptable as shareholders wealth is increased.

Marking Guide

Part (a)

Amount raised from rights issue from America in \$
Number of rights issue shares
TERP

Marks

1

1

2

Max 4

Part (b)

Current profit before interest and tax
Current earnings per share
Current P/E ratio
Interest on UK 10% loan
Exchange rate at 30/09/2013 using PPPT
\$ profit after interest from UK operations
Revised profit after tax
Revised EPS
Revised market price
Comment

1

1

1

1

1

1

1

1

1

3

Max 11 marks

(a)

Amount required	<u>£200</u>
Bank loan	<u>£100</u>
Rights Issue	<u>£100</u>
Exchange rates (\$2/£1)	<u>2</u>
Amount to be raised from rights issue from America	\$200

Number of rights shares ($\$200/\5) = 40 shares

TERP calculation

150	$\times 7 =$	1,050
<u>40</u>	$\times 5 =$	<u>200</u>
190		1,250

TERP = $1,250/190 = \$6.58$

(b)

Current EPS (30 September 2014)

	\$million
Profit before interest and tax	80
Tax (25%)	<u>20</u>
PAT	60
Current number of shares	150

Current EPS (PAT/No. of shares) = 40.00 cents

Current price-earnings ratio (P/E) $MP/EP\$ = 7.00/0.4 = 17.5$ times

Revised EPS (30 September 2015)

	£million	£million
Profit before interest and tax from America operations		80
Operating profit from UK operations	25	
Interest on loan ($10\% \times 100$)	<u>10</u>	
	15	
Exchange rate = $\$2 \times (1.1/1.08)$	<u>2.037</u>	
Profit before tax from UK operations		30.56
Total profit before tax in America		<u>110.56</u>
Taxation (25%)		<u>27.64</u>
Profit after tax		<u>82.92</u>

Revised Earnings per share $82.92/190 = \mathbf{43.64 \text{ cents}}$

Using constant P/E ratio, **the revised market price** = $43.64 \times 17.5 = \$7.64$

Comment:

The earnings per share increased from 40 cents to 43.64 cents due to the UK operations. This is because the increase in the earnings from the UK operations was more than the proportionate increase in number of shares from the rights issue.

The current market price of the company is \$7 and after the rights issue the price (TERP) reduced to \$6.58. The reduction in market price of the shares does not reduce the shareholders wealth as the reduction is compensated by increased number of shares. After investing in the UK operations, the share price increased to \$7.64 and therefore increase in shareholders wealth by \$1.06 ($7.64 - 6.58$).



ACCA

Paper F9

Performance Management

Revision Mock Questions

June 2017

Time allowed	15 minutes	Reading and planning
	3 hours	Writing

This paper is divided into two sections:

Section A – ALL 20 questions are compulsory and **MUST** be attempted

Section B – ALL FIVE questions are compulsory and **MUST** be attempted

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

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Section A – ALL questions are compulsory and MUST be attempted

A company has a nominal cost of capital of 18% per annum. If inflation is 6% each year, **the company's real cost of capital to the nearest 0.01% is?**

1. 25.08%
 11.32%
 10.45%
 10.08%

A. CRT plc evaluates an investment project that has an initial outlay followed by annual
B. net cash inflows of \$10 million throughout its infinite life. The evaluation of the inflows
C. produced a present value of \$50 million and a profitability (present value) index of 2.0.
D.

2. **What is the internal rate of return and initial outlay of this project?**

	IRR	Initial outlay
	%	\$m
A.	20	25
B.	20	100
C.	40	25
D.	10	100

3. The validity of using the existing weighted average cost of capital as the appropriate discount rate for deducing the net present value of a project rests on a number of key assumptions. These include the following:

- (i) The investment project has the same level of risk as those projects normally undertaken by the business.
(ii) The investment project is small in relation to the size of the business.

Which one of the following combinations (true/false) concerning the above statements is correct?

	Statement	
	(i)	(ii)
A.	True	True
B.	True	False
C.	False	True
D.	False	False

Consider the following information relating to Marcus Ltd.

		\$
4.	Sales	240,000
	Cost of sales	120,000
	Receivable turnover period	2 months
	Inventory turnover period	3 months
	Payables turnover period	1 month
	Current ratio	1.4 times

Marcus Ltd current asset consists of account receivable and inventories whiles its current liabilities consists of account payables and overdraft.

What is the value of receivables and current liabilities?

	Receivables	Current liabilities
A.	\$50,000	\$40,000
B.	\$25,000	\$30,000
C.	\$30,000	\$25,000
D.	\$40,000	\$50,000

5. Where there is capital rationing, the profitability index (PI) may be used to rank investment projects with a positive net present value. It has been claimed that using the PI is appropriate only when:

- (i) Capital rationing is for a single period.
- (ii) The investment projects are indivisible.

Which ONE of the following combinations (true/false) concerning the above statements is correct?

	Statement (i)	Statement (ii)
6.	A. True	True
	B. True	False
	C. False	True
	D. False	False

A retailer sells 25,000 units of a particular product each year and the demand for the product is even throughout the year. The purchase price of the product is \$4 per unit. The cost of placing each order for the product is \$10 and the cost of holding one unit in stock for one year is \$2.

The supplier has offered a 5% discount for order of 1000 unit or more.

The economic order quantity (EOQ) and the total annual cost at economic order quantity are?

	Economic order quantity	Total annual cost at EOQ
A.	500 units	\$101,000
B.	500 units	\$101,500
C.	600 units	\$101,000
D.	600 units	\$101,500

QTY plc pays an annual dividend of 30 cents per share to shareholders, which is expected to continue in perpetuity. The average rate of return for the market is 9% and the company has a beta coefficient of 1.5. The risk-free rate of return is 4%.

What is the expected rate of return for the shareholders of the company and the predicted value of the shares in the company?

7.	Expected rate of return (%)	Predicted value (cents)
A.	23.5	705
B.	17.5	171
C.	16.5	182
D.	11.5	261

Which one of the following statements is correct?

8. A stock market that is efficient in the semi-strong form cannot be efficient in the weak form
- A. A stock market that is efficient has share price movements occurring on a random basis
- B. A stock market that is efficient in the strong form is one in which investors cannot make any profit
- C. A stock market that is efficient will have regular, recurring patterns of share price movements.
- D.

9. **The group or individuals whose interests are directly affected by the activities of a company are called?**

- A. Agents
- B. Investors
- C. Stakeholders
- D. Shareholders

10.

(i)

Consider the following two statements concerning non-for-profit (NPF) organisations:

(ii)

An NFP organisation has service-related outputs that are difficult to measure in quantitative terms and so it focuses on performance measures linked to input, e.g. minimising the input cost for a given level of output.

A large charity seeks to raise as much funds as possible in order to achieve its charitable objectives, which are non-financial in nature.

Which one of the following combinations (true/false) relating to the above statements is correct?

	Statement (i)	Statement (ii)
A.	True	True
B.	True	False
C.	False	True
D.	False	False

EDO plc has \$1 ordinary shares in issue. For the year just ended, the company generated earnings per share of 25 cents. The dividend pay-out ratio for the year is 60% and the price/earnings ratio is 20 times. Ignore taxation.

What is the gross dividend yield ratio of the company?

- 11.
- 3.0%
 - 5.0%
 - 8.3%
 - 15.0%

A.
B.
C.
D.

Columbus plc has 10 million shares in issue and has a market capitalisation of \$60 million. The company has recently announced a one-for-four rights issue at a discount of 40% on the current market value.

12. **What is the theoretical value of the rights attached to each original share?**

- \$0.48
- \$0.60
- A. \$1.38
- B. \$1.92
- C.
- D.

13. Consider the following statements concerning currency risk hedges:

- (i) A currency swap may be used to hedge for a longer period than that offered by forward exchange contracts.
- (ii) A futures contract can be customised to fit the particular needs of the client.

Which one of the following combinations (true/false) concerning the above statements is correct?

	Statement (i)	Statement (ii)
A.	True	True
B.	True	False
C.	False	True
D.	False	False

Consider the following statements concerning sources of finance.

Invoice discounting requires the discounter to invoice the client's customers for goods or services provided.

A bank bill offers a bank customer the opportunity to discount the bill of exchange at the bank.

Operating leases are rental agreements where the lessor retains responsibility for servicing and maintaining the leased equipment.

'Junk bond' is a term for bonds that have been given a rating by a credit-rating agency that is below investment grade.

14.

(i)

(ii)

(iii)

Which two of the above statements are correct?

(iv)

(i) and (ii)

(i) and (iii)

(ii) and (iv)

(iii) and (iv)

A.

B.

C.

D.

Three views concerning the effect of loan capital on the capital structure of a business are:

15.

The traditional view.

(i)

The Modigliani and Miller (without taxes) view.

(ii)

The Modigliani and Miller (with taxes) view.

(iii)

According to each view, what will be the effect (rise/fall/stay constant) on the cost of equity when the level of loan capital increases?

	Traditional view	Modigliani and Miller (without taxes) view	Modigliani and Miller (with taxes) view
A.	Rise	Rise	Rise
B.	Fall	Stay constant	Rise
C.	Rise	Stay constant	Fall
D.	Fall	Fall	Fall

The financial performance of EBA Co for the most recent year produced the following ratios:

Dividend cover	5 times
Interest cover	6 times
Dividend per share	\$0.20

16. The company has ordinary share capital of \$10m made up of \$0.50 ordinary shares. The company pays tax at 20%.

What is the net profit before interest and taxation of the company?

\$1.2m
\$15.0m
\$28.8m
\$30.0m

A.
B.
C.
D.

17. A UK company expects to receive €200,000 in three months' time for goods sold to a German customer and wishes to hedge the currency risk by taking out a forward contract. The following rates have been quoted:

	Spot rate	3 months forward
Euro per £	1.4925–1.4985	1.4890–1.4897

If the forward contract is taken out, what are the sterling receipts for the UK company?

A.
B.
C.
D.

£133,467
£134,003
£134,255
£134,318

18.

LIA Co has irredeemable loan stock with a nominal value of \$6m on which it pays interest at the rate of 10% per year. The market value of the loan stock is currently \$8 million and the corporation tax rate is 20%. The company also has equity shares in issue with a market capitalisation of \$12 million. The weighted average cost of capital of the company is 12%.

A.
B.
C.
D.

What is the company's cost of equity?

13.3%
14.7%
15.0%
16.0%

Consider the following statements concerning dividend policy.

According to the Modigliani and Miller (without taxes) view of dividend policy:

dividends should be distributed only when investment opportunities are exhausted.
the value of a business is determined by the earning power of its assets rather than by its dividend policy.

19.

Which one of the following combinations (true/false) concerning the above statements is correct?

(i)
(ii)

Statement		
	(i)	(ii)
A.	True	True
B.	True	False
C.	False	True
D.	False	False

Consider the following statements concerning financial gearing.

20. Higher financial gearing increases the risks of:

(i) share price volatility
(ii) earnings per share volatility
(iii) loan default

Which of the above statements are correct?

- A. (i) and (ii)
B. (i) and (iii)
C. (iii) only
D. (i), (ii) and (iii)

Section B – ALL FIVE questions are compulsory and MUST be attempted

1. The financial statement of Aston Co for 2013 and 14 contains the following statement of financial position.

Statement of financial position

	2014	2013
	\$000	\$000
Non-current assets	4,325	3,775
Current assets		
Inventory	575	475
Account receivables	950	550
Cash	100	250
Total current assets	1,625	1,275
Total assets	5,950	5,050
Total equity	4,050	3,750
Non-current liabilities		
10% secured Bond payable 2018	850	850
Current liabilities		
Account payables	625	450
Bank overdraft	425	0
Total current liabilities	1,050	450
Total equity and liabilities	5,950	5,050

Aston Co achieved a turnover of \$4.5 million and cost of sale of \$1.75 million in 2013. In 2014 the turnover increased by 27.8% due to a rapid growth in the industry in which Aston operates as a result of general economic recovery. The respective gross profit margin was 60%.

Required:

Evaluate and discussion on whether Aston Co could be classified as overtrading.

(10 marks)

2. DVA Co is considering a new investment in an unrelated industry. The capital structure of the company consists of 60% equity and 40% debt. The following information has been identified about companies operating in the industry sector of the new investment.

Company	Equity beta (β_e)	Equity: Debt
A	1.3	90:10
B	1.4	80:20

Additional information:

Equity beta of DVA Co	1.25
Risk free rate of return	6%
Market risk premium	4%
Tax rate	30%

Required:

- (a) **Discuss the circumstances under which the weighted average cost of capital can be used to appraise a new investment. (5 marks)**
- (b) **Calculate the project specific cost of equity for the new project. (5 marks)**
- (10 marks)**

3. Fairvalue plc provides cleaning services to offices, hotels and restaurants. Its shares are currently trading at \$5.35 per share and this is expected to increase by 5% per year for the foreseeable future. It also has in issue 8% bonds which are redeemable at their par value of \$100 in five years' time. Alternatively, each bond may be converted on that date into 20 ordinary shares of the company. The company has a cost of debt capital of 7% per year.

Required:

Discuss the attractions to a company of convertible debt compared to straight debt as a source of finance. (4 marks)

Calculate the following current values for each \$100 convertible bond:

- (a) (i) market value;
- (b) (ii) floor value;
- (iii) conversion premium. (6 marks)

(10 marks)

4. BXN plc is a medical research business that has recently patented a device which enables medical professionals to administer vaccinations without the use of needles. The new device has incurred total costs to date of \$4.5 million, of which \$0.5 million relates to consultancy fees that are due for payment in three months' time. The device is now fully developed and ready to launch.

The manufacture and sale of the device would involve immediately purchasing of plant and equipment at a cost of \$8.5 million, which would then be installed in part of the company's premises that is currently unused. Production of the new device could begin immediately and over the expected four-year life of the device, sales are forecast to be as follows:

Year	1	2	3	4
Forecast sales (000's units)	450	650	600	400
Expected selling price per unit	\$35	\$35	\$30	\$25

There would be an immediate injection of working capital of \$1.2 million, which could be released at the end of the expected life of the device. The plant and equipment would have no further use at the end of the four-year period and could be sold for an estimated \$2.0 million at that point.

The variable costs associated with producing and selling the device are estimated at \$6 per unit and estimated annual fixed costs are as follows:

	\$m
Manufacturing	4.4
Selling, administration and distribution	3.2
	<u>7.6</u>

Manufacturing fixed costs include an annual depreciation charge of \$1.5 million. The plant and equipment would attract a written down allowance of 25% on the reducing balance basis and tax is payable one year in arrears at the rate of 30% per annum. BXN plc has a cost of capital of 12%.

(a)

Required:

- (b) **Calculate the net present value of investing in the new plant and equipment and advise whether the investment is financially acceptable.**
(10 marks)

Discuss the causes of capital rationing in the context of investment appraisal.
(5 marks)

(15 marks)

5. TRA Co is an American based company and is listed on a recognised stock exchange and is financed entirely by equity. As ty 30 September 2014 the company had 150 million equity shares in issue with a market price of \$7.00. In the year to 30 September 2014, profit before interest and tax was \$80 million.

The company in the past has exported goods to Europe and now wishes to raise £200 million to establish a subsidiary in the United Kingdom (UK). The directors want to raise half of the amount in the form of a 10% bank loan in pound sterling and the reminder in the form of a rights issue. The right issue will be made in America at a price of \$5.00 per share.

Other relevant information:

- The UK operation is expected to generate operating profit of £25 million for the year to 30 September 2015. Assume that the profit before interest and tax of existing operations as at 30 September 2015 is the same as that of 30 September 2014.
- The price to earnings (P/E) ratio of the company is expected to remain constant for the year to 30 September 2015.
- Tax rate in America is 25% and no tax is expected to be paid in UK for the next three years.
- The profit after interest from UK operations is remitted to America at the end of each year and is taxable in America.
- The current spot rate is \$2 to £1. The expected inflation rates for the year to 30 September 2013 are: 10% in America and 8% in the UK. The one year forward rate is 2.0176 \$/£ and TRA Co can earn 3% per year on short-term deposits in the UK and can borrow short-term in USA at 5.3% per year.

(a) **Required:**

- (b) **Calculate the theoretical ex-rights price per share after the rights issue.**
(4 marks)

Evaluate and comment on the effect of the UK investment on:

(i) The earnings per share of TRA Co; and

(ii) The wealth of the shareholders of TRA Co. (11 marks)

(15 marks)

Formulae Sheet

Economic Order Quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

Miller-Orr Model

Return point = Lower limit + (1/3 × spread)

$$\text{Spread} = 3 \left[\frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{interest rate}} \right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i (E(r_m) - R_f)$$

The Asset Beta Formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1-T))} \beta_e \right] + \left[\frac{V_d(1-T)}{(V_e + V_d(1-T))} \beta_d \right]$$

The Growth Model

$$P_0 = \frac{D_0(1+g)}{(K_e - g)} \text{ or } P_0 = \frac{D_0(1+g)}{(r_e - g)}$$

Gordon's Growth Approximation

$$g = b r_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d} \right] k_e + \left[\frac{V_d}{V_e + V_d} \right] k_d (1-T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing Power Parity and Interest Rate Parity

$$S_1 = S_0 \times \frac{(1+h_c)}{(1+h_b)}$$

$$F_0 = S_0 \times \frac{(1+i_c)}{(1+i_b)}$$

Present Value Table

Present value of 1 ie $(1 + r)^{-n}$

Where r = discount rate
 n = number of periods until payment

		Discount rate (r)									
Periods		1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
(n)											
1		0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2		0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3		0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4		0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5		0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6		0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7		0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8		0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9		0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10		0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11		0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12		0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13		0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14		0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15		0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
(n)		11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1		0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2		0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3		0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4		0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5		0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6		0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7		0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8		0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9		0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10		0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11		0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12		0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13		0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14		0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15		0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065

Annuity Table

Present value of an annuity of 1 ie $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
 n = number of periods

		Discount rate (r)										
Periods		1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
(n)												
1		0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	1
2		1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	2
3		2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	3
4		3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	4
5		4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	5
6		5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	6
7		6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	7
8		7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	8
9		8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	9
10		9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	10
11		10.37	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	11
12		11.26	10.58	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	12
13		12.13	11.35	10.63	9.986	9.394	8.853	8.358	7.904	7.487	7.103	13
14		13.00	12.11	11.30	10.56	9.899	9.295	8.745	8.244	7.786	7.367	14
15		13.87	12.85	11.94	11.12	10.38	9.712	9.108	8.559	8.061	7.606	15
(n)		11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1		0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	1
2		1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528	2
3		2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106	3
4		3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589	4
5		3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991	5
6		4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326	6
7		4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605	7
8		5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837	8
9		5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031	9
10		5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192	10
11		6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327	11
12		6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439	12
13		6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533	13
14		6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611	14
15		7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675	15