Sales were $270,500 and $337,500 for the years ended 31 March 1994 and 1995 respectively. Corresponding figures for cost of sales were $184,500 and $240,500 respectively. Purchases for 1994 amounted to $194,500.

Required:

Calculate the following ratios for 1994 and 1995:
(a) gross profit ratio;
(b) stock turnover rate;
(c) current ratio;
(d) quick ratio; and
(e) credit period received from trade creditors (in months).
(Calculations to one decimal place) (10 marks)

1997 Q.2
The financial information of Games Limited for the year ended 31 December 1996 is presented below:

	$	$
Credit sales		504,000
Opening stock	84,000	
Add: Purchases	382,200	
	466,200	
Less: Closing stock	154,000	
Cost of sales		312,200
Gross profit		191,800
Net profit		47,600

Balance sheet as at 31 December 1996

	$	$
Fixed assets (at net book value)		
Plant and equipment		610,400
Furniture and fittings		173,600
		784,000
Current assets		
Stock	154,000	
Debtors	105,000	
Bank	7,000	266,000
		1,050,000
Shareholders' fund		
Share capital ($1 ordinary shares)		770,000
Retained earnings		64,400
		834,400
Current liabilities		
Creditors	168,000	
Accruals	47,600	215,600
		1,050,000

Required:

(a) Calculate the following for 1996:
(i) Working capital;
(ii) Return capital employed;
(iii) Quick ratio;
(iv) Stock turnover rate;
(v) Debtors' collection period (in months); and
(vi) creditors' repayment period (in months).
(Calculations to one decimal place.) (6 marks)

(b) Give two possible dangers of having too little working capital. (4 marks)

1999 Q.3

The financial statements of Global Limited are presented below:

Profit and Loss Accounts
For the years ended 31 March

	1999	1998
	$	$
Credit sales	800,400	718,800
Less: Cost of goods sold	453,600	339,600
Gross profit	346,800	379,200
Less: Operating expenses	264,000	289,200
Net profit	82,800	90,000

Balance Sheets
As at 31 March

	1999	1998	1997
	$	$	$
Fixed assets (at net book value)	344,400	331,200	350,500
Current assets			
Stock	422,400	383,200	220,800
Debtors (net)	249,600	181,200	165,600
Bank	50,400	32,000	64,300
	722,400	596,400	450,700
	1,066,800	927,600	801,200
Capital and reserves			
$1 Ordinary shares	190,000	170,000	170,000
Retained earnings	238,000	155,200	65,200
	428,000	325,200	235,200
Long-term liabilities	295,600	282,000	256,000
Current liabilities			
Creditors	321,800	303,500	301,400
Accruals	21,400	16,900	8,600
	343,200	320,400	310,000
	1,066,800	927,600	801,200

Required:

(a) Compute the following ratios for 1999 and 1998:
(i) Net profit ratio;
(ii) Return on shareholders' fund;
(iii) Quick ratio; and
(iv) Debtors' collection period (in months).
Note: Calculations to two decimal places. (7 marks)

(b) Comment briefly on the profitability and liquidity of Global Limited for 1999. (3 marks)

2002 Q.3

The financial information of Grand View Limited for the year ended 31 December 2001 is presented below:

Profit and loss account for the year ended 31 December 2001

			$	$
Cash sales				252,000
Credit sales				1,008,000
				1,260,000
Less:	Cost of sales			
	Opening stock		210,000	
	Purchases		955,500	
			1,165,500	
	Less:	Closing stock	385,000	780,500
Gross profit				479,500
Less:	Operating expenses			360,500
Net profit				119,000

Balance sheet as at 31 December 2001

Assets	$
Office equipment	1,145,000
Furniture and fittings	381,000
Stock	385,000
Debtors	262,500
Bank	451,500
	2,625,000

Liabilities and shareholders' fund	$
Creditors	420,000
Accruals	119,000
Ordinary share capital	1,925,000
Retained profits	161,000
	2,625,000

Grand View Limited had also produced the following ratios for the year 2000.

Current ratio	1.93 : 1
Quick ratio	1.01 : 1
Stock turnover rate	3.02 times
Debtors' collection period	3.26 months
Net profit ratio	10.07%
Return on capital employed	6.11%

Required:

(a) Compute the following ratios for the year 2001:
(i) Current ratio
(ii) Quick ratio
(iii) Stock turnover rate
(iv) Debtors' collection period (in months)
(v) Net profit ratio
(vi) Return on capital employed
(Calculations to two decimal places) (9 marks)

(b) Based on the ratios for the year 2000, comment briefly on the liquidity and profitability of the company for the year 2001. (5 marks)

2003 Q.4

Hamilton Limited has an issued capital consisting of 100,000 ordinary shares of $1 each. The information below relates to the year 2001:

As at 1 January 2001	$
Current assets	45,000
Total assets	180,000
Long–term liabilities	57,000
Current ratio	3 : 1

As at 31 December 2001	$
Fixed assets	153,000
Total assets	213,000

During the year ended 31 December 2001	$
Increase in working capital	9,000
Net profit for the current year	40,000
Transfer to general reserve	7,000
Retained profit for the current year	20,000

You are required to:

(a) Calculate the following figures for Hamilton Limited:
(i) Fixed assets, 1 January 2001
(ii) Current liabilities, 1 January 2001
(iii) Shareholders' fund, 1 January 2001
(iv) Current assets, 31 December 2001
(v) Current liabilities, 31 December 2001
(vi) Dividends declared for the year 2001 (8 marks)

On 1 January 2002, Hamilton Limited made an additional issue of 200,000 ordinary shares at $1.80 per share, payable in full on application.

Applications were received for 220,000 shares and the cash was returned to the unsuccessful applicants on 15 January 2002. The shares were duly allotted to the other applicants on the same date.

On 1 July, Hamilton Limited raised additional finance by issuing $600,000 5% debentures at 98. Debenture interest was to be paid half-yearly on 30 June and 31 December.

You are required to:

(b) Prepare journal entries for Hamilton Limited to record the above transactions in 2002. (Narrations are not required.) (6 marks)

1993 Q.10 Bank Reconciliation + Ratios

Mr. Lee commenced his business with $50,000,000, of which $40,000,000 was used in buying an office. He was engaged in retail trading and all sales were made on a credit basis.

After a year's trading, he was surprised to have a bank overdraft of $8,255,000 as indicated by the bank statement at 30 April 1993 whereas the cash book showed a credit balance of $7,865,300.

Upon investigation, he found that:

(i) Six cheques (which amounted to $750,000 in total) were deposited on 30 April 1993 but were not yet credited by the bank.

(ii) An electricity bill settled by the bank's autopay system in April 1993 amounted to $6,290. It is the practice of the company to record this expense upon receipt of the bank statement of the month.

(iii) The March balance of $65,870 in the cash book was carried forward as $56,780.

(iv) A debtor settled his account of $87,500 by credit transfer.

(v) Interest of $58,000 was charged by the bank on the overdraft. No record of this had yet been made.

(vi) A cheque for $89,000 received from a debtor was returned by the bank marked "UNPAID". This amount was deducted from the balance in the bank statement but had not been entered in the books.

(vii) Two cheques drawn by Mr. Lee were not yet presented to the bank for payment. They were (#80967) $420,000 and (#80973) $75,000.

(viii) A debt of $78,000 previously written off as bad was now recovered and a cheque dated 2 May 1993 was received from the customer concerned. This had been recorded in the cash book but the cheque still remained in the cash till.

Mr. Lee tried to draw up a balance sheet to reveal the financial situation of the business but he was hesitant on most of the figures:

	$000	$000		$000	$000
Fixed assets			Capital		50,000
Premises, net	?		Net profit		?
Delivery van, net	?	?			?
			Drawings		?
Current assets					?
Stock	?		**Current liabilities**		
Debtors	?		Creditors	?	
Cash	?		Bank O/D	?	
		?			?
		?			?

The following data have been complied for your information:

Sales for the year	$60,000,000
Gross profit margin	40%
Net profit to sales	11%
Return on total assets employed	12.5%
Depreciation of fixed assets	25%
Stock turnover (stock level constant throughout the year)	6 times
Credit period allowed to debtors	2 months
Current ratio	1.4 : 1
Working capital	$5,000,000

Required:

(a) Update the bank balance in the hooks of Mr. Lee as at 30 April 1993. (7 marks)

(b) Prepare a bank reconciliation statement as at 30 April 1993. (3 marks)

(c) Draw up the balance sheet for Mr. Lee as at 30 April 1993, filling in all the missing figures. (10 marks)

2000 Q.7

The profit and loss account of Sunny Fashion for the year ended 31 December 1999 is shown below:

	$	$	$
Sales			1,125,000
Less: Sales returns			45,000
			1,080,000
Cost of goods sold			
Opening stock		?	
Purchases	?		
Less: Purchases returns	28,000	?	
		?	
Less: Closing stock		?	648,000
Gross profit			432,000
Less: Rent and rates		185,500	
Salaries		120,000	
Selling expenses		18,000	
Depreciation of fixed assets		6,500	
Sundry expenses		6,000	336,000
Net profit			96,000

Additional information:

(i) The closing stock and the opening stock amounted to the same figure.

(ii) The stock turnover rate was 8 times.

(iii) Debtors' collection period for the year was two months and creditors' repayment period was three months.

(iv) Sales and purchases accrued evenly throughout the year.

(v) All purchases and 90% of the net sales were on credit.

(vi) The current ratio was 2.1 : 1.

(vii) Current assets consisted of cash at bank, debtors, stock and prepayments.

(viii) Cash at bank amounted to 40% of working capital.

(ix) The fixed assets had a cost of $339 800 and a provision for depreciation of $191 500 at 1 January 1999. There were no additions and disposals of fixed assets during the year.

(x) The return based on the owner's capital at 31 December 1999 was 30%.

(xi) Drawings during the year amounted to $36 000.

Required:

(a) Calculate the amounts for closing stock and gross purchases. (4 marks)

(b) Prepare the balance sheet of Sunny Fashion as at 31 December 1999. (12 marks)

(c) Briefly comment on the liquidity and profitability of Sunny Fashion for 1999 if the company had the following figures in 1998:

Current ratio	1.6 : 1
Stock turnover rate	9 times
Debtors' collection period	2½ months
Return on owner's capital	45%

(4 marks)

1992S Q.10
Mr. Chan provided you with the following information relating to his company for the 1990/91 financial year ended on 31 August:

(i) The current assets of his company consisted of stock, debtors and cash at bank.

(ii) Creditors was his only liability.

(iii) He maintained the value of his closing stock at the same level as his opening stock.

(iv) The value of the fixed assets at the beginning of the year was $50,000.

(v) He withdrew $40,000 for his own use.

(vi) He achieved the following accounting ratios in his operation through the year:

Current ratio	2:1
Liquid ratio	1:1
Sales to fixed assets (valued at the beginning of the year) ratio	8:1
Debtors (at the end of the year) to sales ratio	1:20
Gross profit margin	25%
Stock turnover per year	6 times
General expenses (excluding depreciation) to sales ratio	1:10
Depreciation on fixed assets (reducing balance method was adopted)	10% p.a.

Required:

Prepare for Mr. Chan
(a) a trading and profit and loss account for the year ended 31 August 1991; and

(b) a balance sheet as at that date. (20 marks)

2004 Q.2
(A) What do the following two types of ratio measures?
(a) Liquidity ratios
(b) Profitability ratios (4 marks)

(B) Selected financial data for Vera Limited is presented below:

Profit and loss account data for the year ended 31 March 2004

	$
Sales	248,600
Returns inwards	15,200
Cost of goods sold	155,750
Operating expenses	43,390
Net profit	34,260

Balance sheet data as at 31 March	2003	2004
	$	$
Furniture and fixtures (net)		18,420
Office equipment (net)		32,480
Stock	28,750	26,400
Trade debtors	29,260	30,340
Bank		660
		108,300
Ordinary share capital		50,000
Share premium		12,890
Retained profits		15,500
Trade creditors		26,900
Accruals		3,010
		108,300

You are required to:
Calculate (to two decimal places) for Vera Limited the following ratios for the year ended 31 March 2004:
(a) Quick ratio
(b) Stock turnover rate
(c) Debtors' collection period (in months)
(d) Gross profit ratio
(e) Returns on capital employed (10 marks)

2008 – Q4c out of DSE syllabus.

The Macho Club is a non-profit making organisation which aims at promoting long distance running. Members are required to pay an annual membership fee of $500. The Club also sells T-shirts to members for cash.

The account balances relating to membership fees and T-shirt trading are as follows:

	As at 1 January 2007	As at 31 December 2007
	$	$
Prepaid membership fee	3 000	1 500
Accrued membership fee	5 500	7 500
Amount owing to suppliers	8 970	13 980
Stock of T-shirts	6 320	5 730

The following are the related cash receipts and payments during the year ended 31 December 2007:

	$
Membership fee received	84 000
Payment to suppliers	22 890
Commission on T-shirt sales	4 200
T-shirt sales	48 200

Accrued membership fee of $2500 brought down from 2006 was confirmed to be uncollectible and written off in 2007.

REQUIRED:

(a) Draw up the membership fee account for Macho Club, showing the amount of income derived from membership fee for the year ended 31 December 2007. (4 marks)

(b) Prepare the trading account for Macho Club for the year ended 31 December 2007, showing the profit or loss on the sales of T-shirts. (6 marks)

(c) Calculate (to two decimal places) the following ratios of Macho Club for the year ended 31 December 2007:
   (i) Stock turnover rate (in months)
   (ii) Average credit period received from trade creditors (in days) (4 marks)

1992 - Q.7

The following are the balance sheets of Stonemoss Ltd.:

Balance sheets as at 30 June

	1991	1990
	$	$
Fixed assets	739 000	650 000
Premises (net)	84 000	71 000
Plant and machinery (net)	8 000	20 000
Motor vehicles (net)		
Current assets		
Stock	32 000	43 000
Sundry debtors	37 500	52 000
Cash in hand	56 320	61 200
	956 820	897 200
Authorised capital 1 000 000 Ordinary shares of $1 each	1 000 000	1 000 000
Issued capital 500 000 ordinary shares of $1 each	500 000	500 000
General reserves	47 900	84 600
Profit and loss account	82 390	12 330
Profit for the year	37 670	70 060
Current liabilities		
Bills payable	50 000	80 210
Trade creditors	177 060	150 000
Bank overdraft	61 800	-
	956 820	897 200

On 2 July 1991, the company decided to increase its liquid capital by issuing 300 000 ordinary shares of $1.00 each at $3.50 per share, $1.50 payable on application and $2.00 on allotment. Investors subscribed for 800 000 shares and the directors rejected small applicants for 50 000 shares. The remaining shares were allotted on the basis of 2 shares for every 5 shares applied for. The balance of application monies was applied to the allotment.

Required:

(a) Calculate the returns on the total assets employed and quick ratios for the accounting years 1990 and 1991. Basing on your calculations, comment on me profitability and liquidity position of Stonemoss Lid.

(b) Prepare journal entries to record the issue of shares

(c) Prepare an extract of the balance sheet (capital section only) after the issue of shares.

(20 marks)

2008 – Q4c

The Macho Club is a non-profit making organisation which aims at promoting long distance running. Members are required to pay an annual membership fee of $500. The Club also sells T-shirts to members for cash.

The account balances relating to membership fees and T-shirt trading are as follows:

	As at 1 January 2007	As at 31 December 2007
	$	$
Prepaid membership fee	3 000	1 500
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Commission on T-shirt sales	4 200
T-shirt sales	48 200

Accrued membership fee of $2500 brought down from 2006 was confirmed to be uncollectible and written off in 2007.

REQUIRED:

(a) Draw up the membership fee account for Macho Club, showing the amount of income derived from membership fee for the year ended 31 December 2007. (4 marks)

(b) Prepare the trading account for Macho Club for the year ended 31 December 2007, showing the profit or loss on the sales of T-shirts. (6 marks)

(c) Calculate (to two decimal places) the following ratios of Macho Club for the year ended 31 December 2007:
  (i) Stock turnover rate (in months)
  (ii) Average credit period received from trade creditors (in days) (4 marks)

1992 - Q.7

The following are the balance sheets of Stonemoss Ltd.:

Balance sheets as at 30 June

	1991	1990
	$	$
Fixed assets	739 000	650 000
Premises (net)	84 000	71 000
Plant and machinery (net)	8 000	20 000
Motor vehicles (net)		
Current assets		
Stock	32 000	43 000
Sundry debtors	37 500	52 000
Cash in hand	56 320	61 200
	956 820	897 200
Authorised capital 1 000 000 Ordinary shares of $1 each	1 000 000	1 000 000
Issued capital 500 000 ordinary shares of $1 each	500 000	500 000
General reserves	47 900	84 600
Profit and loss account	82 390	12 330
Profit for the year	37 670	70 060
Current liabilities		
Bills payable	50 000	80 210
Trade creditors	177 060	150 000
Bank overdraft	61 800	-
	956 820	897 200

On 2 July 1991, the company decided to increase its liquid capital by issuing 300 000 ordinary shares of $1.00 each at $3.50 per share, $1.50 payable on application and $2.00 on allotment. Investors subscribed for 800 000 shares and the directors rejected small applicants for 50 000 shares. The remaining shares were allotted on the basis of 2 shares for every 5 shares applied for. The balance of application monies was applied to the allotment.

Required:

(a) Calculate the returns on the total assets employed and quick ratios for the accounting years 1990 and 1991. Basing on your calculations, comment on me profitability and liquidity position of Stonemoss Lid.

(b) Prepare journal entries to record the issue of shares

(c) Prepare an extract of the balance sheet (capital section only) after the issue of shares.

(20 marks)

2006-Q.4b (Issue of Shares + Ratio)

Ball Limited had an issued share capital consisting of 650 000 ordinary shares of $1 each as at 1 January 2005. On 1 July 2005, the company made an additional issue of 250 000 ordinary shares at $1.50 per share, payable in full on application. Applications were received for 260 000 shares on 8 July 2005. The shares were allotted to the successful applicants on 15 July 2005. Cash was returned to the unsuccessful applicants on the same day.

You are required to

(a) Prepare journal entries for Ball Limited to record the share issue in July 2005.
(Narrations are not required) (6 marks)

The company's information below relates to the year ended 31 December 2005:

	$
As at 1 January 2005:	
Stock	62 430
Debtors	60 080
Share premium	75 000
Retained profits	213 000
During year 2005:	
Sales	800 000
Purchases	500 000
Operating expenses	320 000
As at 31 December 2005:	
Stock	156 230
Debtors	102 400
Cash in bank	168 370
Creditors	184 200
Accruals	4 000

You are required to:

(b) Calculate (to one decimal place) the following for year 2005:

(i) Quick ratio

(ii) Credit period allowed to debtors (in days)

(iii) Stock turnover rate

(4 marks)

(c) Calculate the amount of shareholders' fund as at 31 December 2005

(4 marks)

HKCEE Accounting Ratios

Marking Scheme

1991 Q.2

Question 2 — Marks

(a) Quick ratio

$= \dfrac{\textit{current assets less stock}}{\textit{current liabilities}}$

$= \dfrac{272000}{166600} = 1.6$ — 2

Period allowed for the trade debtors

$= \dfrac{\textit{Debtors}}{\textit{sales}} \times 12 \textit{ months}$

$= \dfrac{260000}{460000} \times 12 \textit{ months}$

$=$ **6.8 months** — 2

Liquidity position of Long Island Company:

- had $1.6 sufficient quick assets to meet every $1 current liabilities
- The credit period allowed for the trade debtors is more that half a year. May need to have tighter control to reduce the risk of bad debts. — 2

Question 2 (Cont'd.) — Marks

(b) Stock Turnover Ratio

$= \dfrac{\textit{cost of goods sold}}{\textit{average stock}}$

$= \dfrac{346500}{(34600 + 26300) \times \frac{1}{2}} = 11.4$ — 2

Importance of Stock Turnover Ratio:
It shows the number of times the stock is sold in a year.
The higher the ratio, the more will be the profit generated from selling the stock if the gross profit percentage stays the same. — 2

Total: 10 marks

1995 Q.2

QUESTION 2

		1994	1995	Marks
(a) Gross profit ratio				
	$\dfrac{(\$270500 - \$184500)}{\$270500} \times 100\%$ =	31.8%		1
	$\dfrac{(337500 - \$240500)}{\$337500} \times 100\%$ =		28.7%	1
(b) Stock turnover ratio				
	$\dfrac{\$184500}{(\underbrace{184500 + \$43000 - \$194500}_{\text{opening stock}} + \underbrace{\$43000}_{\text{closing stock}}) \div 2}$ =	4.9 times		$1\frac{1}{2}$
	$\dfrac{\$240500}{(\$43000 + \$88500) \div 2}$ =		3.7 times	1
(c) Current ratio				
	$\dfrac{\$94000}{\$46000}$ =	2.0 : 1		$\frac{1}{2}$
	$\dfrac{\$134500}{\$81000}$ =		1.7 : 1	$\frac{1}{2}$
(d) Quick ratio				
	$\dfrac{(\$94000 - \$43000)}{\$46000}$ =	1.1 : 1		1
	$\dfrac{(\$134500 - \$88500)}{\$81000}$ =		0.6 : 1	1
(e) Credit period received from trade creditors				
	$\dfrac{\$36000}{\$194500} \times 12 \textit{ months}$ =	2.2 months		1
	$\dfrac{\$66000}{(\$240500 + \$88500 - \$43000)} \times 12 \textit{ months}$ =	2.8 months		$1\frac{1}{2}$
or	$\dfrac{\$51000}{(\$240500 + 88500 - 43000)} \times 12 \textit{ months}$ =	2.1 months		

Total: 10 marks

1997 Q.2

(a) (i) Working capital

$\$266\,000 - \$215\,600 = \$50\,400$ 1

(ii) Return on capital employed

$\frac{\$47\,600}{\$834\,400} \times 100\% = 5.7\%$ 1

(iii) Quick ratio

$\frac{(\$266\,000 - 154\,000)}{\$215\,600} = 0.5:1$ 1

(iv) Stock turnover rate

$\frac{\$312\,200}{(\$84\,000 + 154\,000) \div 2} = 2.6 \text{ times}$ 1

(v) Debtors' collection period

$\frac{\$105\,000}{\$504\,000} \times 12 \text{ months} = 2.5 \text{ months}$ 1

(vi) Creditor's repayment period

$\frac{\$168\,000}{\$382\,200} \times 12 \text{ months} = 5.3 \text{ months}$ 1 (6)

(b)
- If a business has too little working capital, there is the danger that creditors will take legal action against the company to get payments, and that the business may well go into liquidation as a result.
- At best, the business will acquire a reputation for being a slow payer, and it may find suppliers are only willing to supply goods for immediate cash payments i.e. they are not able to buy on credit.
- Shortage of working capital will also mean that stock is likely to be kept below optimum level for the potential business and that the business may not be able to offer credit terms to its own customers.
- Above all, there will be a chronic shortage of cash which will often dictate how the business is run, may prevent normal bulk buying taking place and will prove a worry and an embarrassment to all concerned in the management.

(2 marks for each relevant point, max. 4 marks) 4 (4)

Total: 10 marks

1999 Q.3

(a) (i) Net profit ratio

1999: $\frac{82\,800}{800\,400} \times 100\% = 10.34\%$ ½

1998: $\frac{90\,000}{718\,800} \times 100\% = 12.52\%$ ½

(ii) Return on shareholders' fund

1999: $\frac{82\,800}{(428\,000 + 325\,200)/2} \times 100\% = 21.99\%$ 1

1998: $\frac{90\,000}{(325\,200 + 235\,200)/2} \times 100\% = 32.12\%$ 1

(iii) Quick ratio

1999: $\frac{722\,400 - 422\,400}{343\,200} = 0.87:1$ 1

1998: $\frac{596\,400 - 383\,200}{320\,400} = 0.67:1$ 1

(iv) Debtors' collection period

1999: $\frac{(249\,600 + 181\,200)/2}{800\,400} \times 12 \textit{ months} = 3.23 \textit{ months}$ 1

1998: $\frac{(181\,200 + 165\,600)/2}{718\,800} \times 12 \textit{ months} = 2.89 \textit{ months}$ 1

(7)

(b) Profitability

The company's profitability deteriorated during 1999 as shown by decreases in net profit ratio and return on shareholders' fund. 1½

Liquidity

There seems to be improvement in the liquidity position of the company since the quick ratio increased in 1999. However, the company was slower in collecting its debts from debtors in 1999. 1½ (3)

Total: 10 marks

2002 Q.3

QUESTION 3 — Marks

(a)

(i) Current ratio = Current assets ÷ current liabilities ½
= (385 000 + 262 500 + 451 500) ÷ (420 000 + 119 000)
= 2.04 : 1 ½ — 1½

(ii) Quick ratio = (Current assets − stock) ÷ current liabilities
= (262 500 + 451 500) ÷ (420 000 + 119 000)
= 1.32 : 1 ½ ½ — 1½

(iii) Stock turnover rate = Cost of goods sold ÷ average stock
= 780 500 ÷ [(210 000 + 385 000) × 1/2]
= 2.62 times without K ½ — 1½

(iv) Debtors' collection period = (Debtors ÷ credit sales) × 12 months
= (262 500 ÷ 1 008 000) × 12 ½ ½
= 3.12 months or $\boxed{3.13}$ — 1½

(v) Net profit ratio = (Net profit ÷ sales) × 100%
= (119 000 ÷ 1 260 000) × 100%
= 9.44% ½ ½ not necessary — 1½

(vi) Return on capital employed = (Net profit ÷ capital employed) × 100%
= [119 000 ÷ (1 925 000 + 161 000)] × 100%
= 5.70% ½ ½ not necessary — 1½
OR 0.06 2086000 — (9)

(b) Liquidity comparison

- there seems to be slight improvement in the liquidity position of the company — 1
- the current ratio and quick ratio increased in 2001 — 1
- the company had also shortened the debtors' collection period — ½
- the stock turnover rate shows that the company was slower in selling the stock in 2001 — ½

(3)

Profitability

- the company's profitability has worsened during 2001 — 1
- as shown by decreases in net profit ratio and return on capital employed ½ ½ — 1

(2)

Total: 14 marks

Any other reasons ½ Profitability max 1.

2003 Q.4

QUESTION 4 — Marks

(a)

(i) Fixed assets, 1 January 2001:
\$180 000 − \$45 000 = \$135 000 — 1

(ii) Current liabilities, 1 January 2001:
\$45 000 ÷ 3 = \$15 000 — 1

(iii) Shareholders' fund, 1 January 2001:
\$180 000 − \$57 000 − \$15 000 = \$108 000 — 1½

(iv) Current assets, 31 December 2001:
\$213 000 − \$153 000 = \$60 000 — 1

(v) Current liabilities, 31 December 2001:
\$60 000 − [(\$45 000 − \$15 000) + \$9000] = \$21 000 — 2

(vi) Dividend for the year 2001:
\$40 000 − \$20 000 − \$7000 = \$13 000 — 1½

(8)

(b) Journal

2002		Debit \$	Credit \$	
Jan 15	Bank (220 000 × \$1.80)	396 000		½
	Share application – ordinary shares		396 000	½
Jan 15	Share application – ordinary shares	36 000		½
	Bank (20 000 × \$1.80)		36 000	½
Jan 15	Share application – ordinary shares	360 000		½
	Ordinary share capital		200 000	½
	Share premium (200 000 × \$0.80)		160 000	½
July 1	Bank (\$600 000 × 98%)	588 000		½
	Debenture discount	12 000		½
	5% debentures		600 000	½
Dec 31	Debenture interest (600 000 × 5% × ½)	15 000		½
	Bank		15 000	½
				(6)

Total: 14 marks

1993 Q.10

(a)

Cash Book (Bank column only)

			$			$	
1	(iii)	Feb balance understated	9 090		Balance b/f	7 865 300	½
1	(iv)	Debtors: credit transfer	87 500	(v)	Bank interest payable	58 000	1
½		Balance c/f	8 000 000	(ii)	Electricity: Standing order	6 290	1
				(vi)	Dishonoured cheque	89 000	1
				(viii)	Post-dated cheque	78 000	1
			~~8 121 590~~ 8096590			~~8 121 590~~ 8096590	(7)

(b)

Bank reconciliation statement
as at 30 April 1993

	$		
Bank overdraft as per bank statement	(8 255 000) ½		
Add (i) uncredited cheques	750 000	1	
	(7 505 000)		
Less (vii) unpresented cheques ($420 000 + 75 000)	495 000	1	
Adjusted bank overdraft as per cash book	(8 000 000) ½		(3)

Balance sheet as at 30 April 1993

		($'000)	($'000)		($'000)	($'000)	
	FIXED ASSETS			Capital		50 000	
1	Premises, net	30 000		Add: Net profit		6 600	1
1	Delivery van net	5 300	35 300			56 600	
				Less: Drawings		16 300	1
						40 300	
	CURRENT ASSETS			**CURRENT LIABILITIES**			
2	Stock	6 000 (2)		Creditors	4 500		1
1	Debtors	10 000		Bank overdraft	8 000	12 500	1
1	Cash	1 500	17 500				
			52 800			52 800	(10)

Total: 20 marks

Workings

1.	Premises, net	$40 000 000 × 75%	=	$30 000 000
	Net Profit	$60 000 000 × 11%	=	$ 6 600 000
	Total Asset	6 600 000 ÷ 12.5%	=	$52 800 000
4.	Current Liabilities	$5 000 000 ÷ (1.4 - 1.0)	=	$12 500 000
5.	Current Assets	$12 500 000 + 5 000 000	=	$17 500 000
6.	Fixed Assets	$52 800 000 - $17 500 000	=	$35 300 000
7.	Delivery Van, net	$35 300 000 - $30 000 000	=	$ 5 300 000
8.	Creditors	$12 500 000 - 8 000 000	=	$ 4 500 000
9.	Closing Capital	$52 800 000 - 12 500 000	=	$40 300 000
10.	Drawings	$40 300 000 - (50 000 000 + 6 600 000) (1)	=	$16 300 000
11.	Stock	$60 000 000 × (1 - 40%) ÷ 6	=	$ 6 000 000
12.	Debtors	$60 000 000 × 2/12	=	$10 000 000
13.	Cash	$17 500 000 - 6 000 000 - 10 000 000	=	$ 1 500 000

2000 Q.7

(a) Closing stock = $648 000 + 8 = $81 000 — 2

Gross purchases = $648 000 + $81 000 – $81 000 + $28 000 = $676 000 — 2

(4)

Alternative answer:

Cost of goods sold	$	$	$
Opening stock		81 000 ½	
Purchases	676 000		
Less: Purchases returns	28 000 ½	648 000	
		729 000	
Less: Closing stock		81 000 ½	648 000 ½ (2)

(b)

Sunny Fashion Store
Balance sheet as at 31 December 1999

	$	$	
Fixed assets at cost		339 800	½
Less: Provision for depreciation ($191 500 + 6 500)		198 000	1
		141 800	
Current Assets			
Stock	81 000		½
Debtors ($1 080 000 × 90% × 2/12)	162 000		1½
Prepayment *(balancing figure)*	25 920		1½
Cash at bank ($178 200 × 40%)	71 280		1½
	340 200		1 A
Less: Current liabilities			
Creditors ($648 000 × 3/12)	162 000		1½
Working capital		178 200	
		320 000	
Capital			
Balance as at 1 January 1999 *(balancing figure)*		260 000	1½
Add: Net profit		96 000	½
		356 000	
Less: Drawings		36 000	½
Balance as at 31 December 1999 ($96 000 ÷ 30%)		320 000	1½
			(12)

(c) The liquidity of Sunny Fashion has improved as revealed by an increase in current ratio and a shortening of debtors' collection period. However, the company was slower in selling its stock in 1999. 2

The profitability of the company has deteriorated as shown by a decrease in return on owner's capital. 2
(4)

1992S Q.10

10. (a)

Mr. Chan
Trading and Profit and Loss Account for the year ended 31 August 1991

	$	$
Sales ($50,000 × 8)		400,000
Less: Cost of Sales:		
Opening stock ($300,000 ÷ 6)	50,000	
Purchases	300,000	
	350,000	
Less: Closing stock ($300,000 ÷ 6)	50,000	
Cost of sales ($400,000 – $100,000)		300,000
Gross profit ($400,000 × 25%)		100,000
Less: General expenses ($400,000 × 1/10)	40,000	
Depreciation ($500,000 × 10%)	5,000	45,000
Net profit		55,000

(b)

Mr. Chan
Balance Sheet as at 31 August 1991

	$	$
Fixed assets at net book value ($50,000 – $5,000)		45,000
Current Assets:		
Stock	50,000	
Debtors ($400,000 × 1/20)	20,000	
Bank	30,000	
	100,000	
Less: Current Liabilities:		
Creditors	50,000	
Working capital		50,000
		95,000
Financed by:		
Capital as at 1.9.90		80,000
Add: Net profit for the year		55,000
		135,000
Less: Drawings		40,000
Capital as at 31.8.91		95,000

Workings:

Current ratio = 2:1

$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{2}{1}$$

$$\frac{\text{Stock} + \text{Debtors} + \text{Cash}}{\text{Creditors}} = \frac{2}{1} \quad \text{........(1)}$$

Liquid Ratio = 1:1

$$\frac{\text{Debtors} + \text{Cash}}{\text{Creditors}} = \frac{1}{1}$$

$$\frac{20{,}000 + \text{Cash}}{\text{Creditors}} = \frac{1}{1} \quad \text{........(2)}$$

Solve (1) and (2),

Cash = $30,000

Creditors = $50,000

2004 Q.2

(A) (a) Liquidity ratios measure the ability of an enterprise to pay its short-term obligations and to meet unexpected needs for cash. 2

(b) Profitability ratios measure the operating performance of an enterprise for a given period of time. 2

(4)

(B) (a) Quick ratio = (Current assets − stock) ÷ current liabilities 2
= (30 340 + 660) ÷ (26 900 + 3010)
= 31 000 ÷ 29 910
= 1.04 : 1

(b) Stock turnover rate = Cost of goods sold ÷ average stock 2
= 155 750 ÷ [(26 400 + 28 750) × ½]
= 155 750 ÷ 27 575
= 5.65 times

(c) Debtors' collection period 2
= (Average debtors ÷ net sales) × 12 months
= [(30 340 + 29 260) × ½ ÷ (248 600 − 15 200)]× 12
= (29 800 ÷ 233 400) × 12
= 1.53 months

(d) Gross profit ratio = (Gross profit ÷ net sales) × 100% 2
= [(248 600 − 15 200 − 155 750) ÷ (248 600−15 200)]×100%
= (77 650 ÷ 233 400) × 100%
= 33.27%

(e) Return on capital employed 2
= (Net profit ÷ capital employed) × 100%
= [34 260 ÷ (50 000 + 12 890 + 15 500)] × 100%
= (34 260 ÷ 78 390) × 100%
= 43.70%

(10)

Total: 14 marks

2008 Q.4c

(a)

Membership fee

		$		$	
½	Balance b/f	5 500	Balance b/f	3 000	½
1	Income and expenditure	90 000	Bank	84 000	½
½	Balance c/f	1 500	Income and expenditure: write-off	2 500	½
			Balance c/f	7 500	½
		97 000		97 000	(4)

(b)

Macho Club
Trading account for the year ended 31 December 2007

		$		$	
½	Opening stock	6 320	Sales	48 200	½
2½	Add: Purchases *(workings)*	27 900			
		34 220			
½	Less: Closing stock	5 730			
	Cost of T-shirts sold	28 490			
1	Commission on T-shirt sales	4 200			
	Income and expenditure:				
1	profit on sale of T-shirts	15 510			
		48 200		48 200	

(6)

(c) (i) Stock turnover rate (in months) 2

$$\frac{(\$6320 + \$5730)/2}{\$28\,490} \times 12 = 2.54 \textit{ months}$$

(ii) Average credit period received from trade creditors (in days) 2

$$\frac{(\$8970 + \$13\,980)/2}{\$27\,900} \times 365 = 150.12 \textit{ days}$$

(4)

Total: 14 marks

Workings:

Creditors

		$		$	
½	Cash/ Bank	22 890	Balance b/d	8 970	½
½	Balance c/d	13 980	Purchases (*balancing figure*)	27 900	½
		36 870		36 870	

1992 Q.7

		1991	1990	marks
(a)	Returns on total asset employed	$\frac{37670}{956820} \times 100\%$	$\frac{70060}{897200} \times 100\%$	
		= 3.94%	= 7.81%	2
	Quick ratios $\frac{93820}{227060}$ or	$\frac{125820 - 32000}{288860} = 93820$	$\frac{156200 - 43000}{230210} = 113200$	
	= 0.41	= 0.32	= 0.49	2

- Both the profitability and liquidity of Storemoss Ltd. in 1991 were worse than that in 1990; the rate of return in 1991 was about half of that in 1990 and the amount of liquid asset to pay for every dollar of current liability decreased from nearly 50 cents in 1990 to 32 cents in 1991. 1½

- To serve as a basis for comparing the performance of the company with other firms in the industry. ½ (6)

(b)

Journal

	Dr. $	Cr. $	
$\boxed{\text{Bank}}$ Contd	$\boxed{1\ 200\ 000}$		
Application and allotment		1 200 000	
Being receipt of application money for 800 000 ordinary shares (800 000 × $1.5)			2½
Application and allotment	1 050 000		
Ordinary share capital ($1 × 300 000)		300 000	
Share premium ($2.5 × 300 000)		750 000	
Being allotment of 300 000 ordinary share of $1, paid-up and share premium of $2.5 per share			3½
Application and allotment	75 000		
Bank		75 000	
Being return of application money to 50 000 shares for unsuccessful application (50 000 × $1.5)			2½
Application and allotment	75 000		
Bank		75 000	
Being return of application money to 30 000 shares for excess of money applied to allotment (750 000 × $1.5 − 300 000 × $3.5)			2½ (11)

(c)

Balance sheet (extract)

	$	
Authorized capital 100 000 ordinary of $1 each	1 000 000	½
Issued capital 800 000 ordinary shares of $1 each	800 000	½
Share premium	750 000	½
General reserves	47 900	½
Profit and loss account (82390 + 37670)	120 060	1 (3)
	1 717 960	

Total : 20 marks

2006 Q.4

(a)

Journal

2005		Debit $	Credit $	
July 8	Bank (260 000 × $1.50)	390 000		1
	Share application – ordinary shares		390 000	1
15	Share application– ordinary shares	375 000		½
	Ordinary share capital		250 000	1
	Share premium (250 000 × $0.50)		125 000	1
15	Share application – ordinary shares	15 000		½
	Bank (10 000 × $1.50)		15 000	1
				(6)

(b) (i) Quick ratio:

$$\frac{\$(102\,400 + 168\,370)}{\$(184\,200 + 4\,000)} = \frac{\$270\,770}{\$188\,200}$$

$= 1.4 : 1$ 1

(ii) Credit period allowed to debtors:

$$\frac{\$(60\,080 + 102\,400) \div 2}{\$800\,000} \times 365 \text{ days}$$

$= 37.1$ days 1

(iii) Stock turnover rate:

$$\frac{\$(62\,430 + 500\,000 - 156\,230)}{\$(62\,430 + 156\,230) \div 2} = \frac{\$406\,200}{\$109\,330}$$

$= 3.7$ times 2

(4)

(c) Calculation of shareholders' fund as at 31 December 2005

	$	
Share capital		
900 000 ordinary shares of $1 each (650 000 + 250 000)	900 000	1
Reserves		
Share premium (75 000 + 125 000)	200 000	1
Retained profits [213 000 + (800 000 – 406 200 – 320 000)]	286 800	1½
	1 386 800	½
		(4)

Total: 14 marks

1. AL2008.Q1(b)

The shareholders' equity section of Hearty Ltd as at 31 December 2006 is as follows:

	$
Ordinary shares (8 000 000 shares of $1 each)	8 000 000
General reserve	2 100 000
Retained profits	1 280 000
	11 380 000

[Additional note, for 2017 DSE onwards] As at 31 December 2006, 8 000 000 ordinary shares have been issued (calculated as $8,000,000 / $1).

In order to increase the market share, Hearty Ltd planned to establish three more outlets over the next few months. The total cost incurred for this expansion would be $5 000 000 which was to be financed by the issue of 1 200 000 ordinary shares at $2.50 each and $2 000 000 6% debentures at par (repayable in 2017).

If the financing scheme was effected on 1 January 2007, the estimated profit before interest and tax for the year ended 31 December 2007 would be $3 700 000, and the tax expenses $200 000.

REQUIRED:

(b) Calculate (to two decimal places) the following estimated accounting ratios for the year ended 31 December 2007:

(1) Return on capital employed (based on average ~~year-end~~ figures) (2 marks)

~~(2) Return on equity (based on year-end figures) (2 marks)~~

(3) Earnings per share (in cents) (2 marks)

Reference:

(a) Distinguish between 'equity capital' and 'loan capital' (4 marks)

2. AL.2009.Q4(a), (b) [modified]

The summarized statement of financial position of Tai Wo Ltd at 31 December 2007 is as follows:

	$
Non-current assets	7 530 000
Working capital	3 316 000
Non-current liabilities – 5% debentures	(5 500 000)
Net assets	5 346 000
Capital and reserves	
Ordinary shares of $5 each	2 000 000
General reserves	1 000 000
Retained profits as at 31 December 2006	1 220 000
Net profit for the year 2007	1 126 000
	5 346 000

The 5% debentures were issued at par on 1 January 2007. There was no movement in ordinary share capital and general reserves during year 2007.

BAFS – Accounting Ratios / Financial analysis (HKALE 2008 – 2012)

REQUIRED:

(a) Based on the information above, calculate (to two decimal places) the following accounting ratios for the year 2007:

(1) Gearing ratio (using year-end figures)

(2) Earnings per share

~~(3) Return on equity (using average figures)~~

(4) Return on capital employed (using average figures) (4 marks)

(b) Referring to your answers in (a) above, explain how the shareholders' return was affected by the gearing of Tai Wo Ltd. (3 marks)

3. AL2011.Q1(a)

Joey and Sam are in a partnership selling local and imported accessories. The following ratios relate to the partnership and the industry average for the year ended 31 December 2009:

	Joey and Sam	*Industry average*
Trade receivables collection period	4.2 months	3.5 months
Trade payables repayment period	1.8 months	2.4 months
Inventory turnover rate	5.7 times	5.0 times

REQUIRED:

(a) With reference to all the above ratios, comment on the liquidity of Joey and Sam's partnership in 2009. (4 marks)

4. AL2012.Q5(a)(b)

The following data relates to Gordon Ltd for the year ended 31 December 2010:

	$
Non-current liabilities: 4% debentures (issued in 2008)	800 000
Ordinary shares of $2 per share, fully paid	970 000
6% preference shares of $1 each (issued in 2009)	600 000
Retained profits brought forward, 1 January 2010	880 000
Net profit after tax for the year 2010	320 000
Taxation	90 000
Dividend paid: Preference shares	36 000
Ordinary shares	72 000

REQUIRED:

(a) Based on the information above, calculate (to two decimal places) the following accounting ratios for Gordon Ltd for the year ended 31 December 2010 ~~using year-end figures~~:

(1) Capital gearing ratio (using year-end figures)

(2) Return on capital employed (using average figures)

(3) Earnings per share

(4) Dividend cover

(8 marks)

(b) Gordon Ltd plans to seek additional long-term finance and expand its business while maintaining a low capital gearing ratio to strengthen its creditworthiness and financial stability. Advise, with explanation, what financing arrangements Gordon Ltd should undertake. (3 marks)

5. AL2010.Q4(A)(B) (Modified, added share premium to general reserve)

(A) From the perspective of potential investors,
(a) Explain how they interpret dividend cover; and (2 marks)
(b) State three limitations of using ratio analysis in assessing the financial performance of a company. (3 marks)

(B) The following financial information relating to Ming Ltd, a listed company providing financial services for customers in Hong Kong:

Income statement for the year ended 31 December 2009 (extract)

	$
Profit before interest and tax	4 450 000
Finance costs	(400 000)
Profit before tax	4 050 000
Taxation	(1 100 000)
Profit after tax	2 950 000

Statement of Financial Position as at 31 December 2009 (extract)

	$
Capital and Reserves	
Ordinary Shares of $2 each	12 000 000
8% Preference shares	4 000 000
General reserve	12 900 000
Retained profits	3 400 000
	32 300 000
Non-current liabilities	
5% Debentures (repayable on 31 December 2015)	8 000 000
	40 300 000

At 31 December 2009, the market price per ordinary share of Ming Ltd was $5. Dividend declared and paid on the ordinary shares amounted to $0.20 per share in 2009. The 8% preference shares were issued in 2007. There was no movement in ordinary share capital during the year 2009.

REQUIRED:

Calculate (to two decimal places) the following accounting ratios for the year 2009:
(a) Earnings per share (1 mark)
(b) Price-earnings ratio (1 mark)
(c) Dividend cover (1 mark)

1. AL2008.Q1(b)

(b)

		$	$
$1 ordinary share capital	($8 000 000 + $1 200 000)		9 200 000
Share premium	($1 500 000 + $1 800 000)		3 300 000
General reserve			600 000
Retained profits	Balance b/d	1 280 000	
	Profit for the year ($3 700 000 - $2 000 000 x 6% - 200 000)	3 380 000	4 660 000
Shareholders' equity			17 760 000
6% debentures			2 000 000
Capital employed			19 760 000

Alternative

		$	$
Shareholders' equity as at 31 December 2006			11 380 000
Issue of 1 200 000 ordinary shares at $2.50 each	(1,200,000 x $2.5)		3 000 000
Profit before interest and tax		3 700 000	
Interest expense	($2 000 000 x 6%)	(120 000)	
Tax expense		(200 000)	
Profit after tax			3 380 000
Shareholders' equity as at 31 December 2007			17 760 000
Issue of $2 000 000 6% debentures at par			2 000 000
Capital employed			19 760 000

(1) **Return on capital employed:** Profit before interest and tax / Capital employed
$ 3 700 000 / $19 760 000 = 18.72% 2

(2) **Return on equity:** Profit after interest and tax / Shareholders' equity
$3 380 000 / $17 760 000 = 19.03% 2

(3) **Earnings per share**: Profit after interest and tax / Number of ordinary shares
$3 380 000 / (8 000 000 + 1 200 000) = 36.74 cents 2

(6)

Reference: Part (a) Distinguish between equity capital and loan capital:

Equity capital	Loan capital
- Shareholders have voting right	- Debenture holders have no voting right
- Dividend is an appropriation of profit	- Interest is an expense
- Dividend rate is not fixed	- Interest rate is fixed
- There is no / stipulated date for repayment of capital	- There is a stipulated date for redemption of debentures
- In case of liquidation, shareholders rank the last to receive back the fund invested	- Debenture holders rank before shareholders in case of liquidation

(2 marks for each relevant comparison, max. 4 marks)

(4)

2. AL.2009.Q4(a)(b)

(a)

(1)	Gearing ratio [$5 500 000 / ($5 346 000 + $5 500 000)]	50.71% (or 0.51)	1
(2)	Earnings per share [$1 126 000 / ($2 000 000 / 5)]	$2.82	1
(3)	Return on equity $1 126 000 / {[($5 346 000 - $1 126 000) + $5 346 000] /2}	23.54% (or 0.24)	1
(4)	Return on Capital employed [$1 126 000 + ($5 500 000 x 5%)] / {[$5 346 000 - $1 126 000 + $5 500 000] + ($5 346 000 + $5 500 000) / 2 }	13.62% or 0.14	1
			(4)

(b)

- Tai Wo Ltd is a highly geared company with half of its capital employed contributed by loan capital.
- When the overall return of the company exceeds the fixed return to debenture holders, the profit in excess (residual profit) will go to the shareholders.
- In this case, the return on capital employed is 13.62% which is in excess of 5%. The profit in excess of 5% will go to the shareholders, resulting in a return on capital of 23.54%. (3)

Max. 3

3. AL2011.Q1(a)

Receivables collection period

- The collection period of the partnership is longer than that of the industry average by 0.7 month. 0.5
- It may be the result of a more lenient credit policy with a longer credit period granted to its customers in order to promote sales 1

(max 1 mark)

Payables repayment period

- The repayment period of the partnership is shorter than the industry average by 0.6 month 0.5
- The business has to repay the supplier faster than its competitors, which hampered the liquidity of the business. 1

(max 1 mark)

Inventory turnover rate

- The inventory turnover rate is higher than industrial average by 0.7 times. 0.5
- The higher the rate, the faster the flow of inventory, the faster the inventory replenishment and there is less obsolescence and outdated inventories. 1

(max 1 mark)

Overall comment

- The higher inventory turnover rate implied the partnership was more able to sell inventories at a faster rate in 2009 and thus in a better liquidity position in this period.
- Yet, the longer collection period and the shorter repayment period indicated that the overall liquidity of the business was worse than its competitors in 2009.

- *The partnership can give cash discount to encourage early settlement from trade receivables, or try to find other suppliers with a longer credit period so as to maintain its liquidity.*

(1 mark each, max 1 mark)

*Note: Making suggestions based on the ratios calculated is **NOT REQUIRED** in HKDSE since 2017.*

(4)

4. AL2012.Q5(a)(b)

(a)

(1) **Capital gearing ratio**
= (Non-current liabilities + Preference share capital) / Capital Employed
= ($800 000 + $600 000) / $3 462 000 (W1)
= 40.44% (or 0.40 / 0.40 : 1) (2)

(2) **Return on capital employed**
= Profit before interest and tax / Capital employed
= [$320 000 + ($800 000 x 4%) + $90 000] / $3 356 000 (W1)
= 13.17% (2)

(3) **Earnings per share**:
= (Net profit after tax – Preference share dividend) / Number of ordinary shares outstanding
= ($320 000 - $36 000) – ($970 000 / $2)
= $0.59 or $58.57 cents (2)

(4) **Dividend cover**
= (Net profit after tax – Preference share dividend) / Ordinary dividend paid
= ($320 000 - $36 000) – ($72 000)
= $3.94 times (2)

(8)

Workings:

W1

Capital Employed	$	$
Ordinary share capital		970 000
Preference share capital		600 000
		1 570 000
Retained profits brought forward, 1 January 2010	880 000	
Add: Net profit after tax for the year 2010	320 000	
	1 200 000	
Less: Dividend paid ($36 000 + $72 000)	108 000	1 092 000
		2 662 000
Non-current liabilities		800 000
Capital employed as at 31 December 2010		3 462 000

Capital Employed	$	$
Ordinary share capital		970 000
Preference share capital		600 000
Retained profits, 1 January 2010		880 000
		2 450 000
Non-current liabilities		800 000
Capital employed as at 1 January 2010		3 250 000

Average capital employed = ($3 250 000 + $3 462 000) / 2 = $3 356 000

(b)

Advice:

- To reduce the capital gearing ratio, ordinary shares should be issued. 1

Explanation: Max. 2

- Issuing preference shares would lead to higher capital gearing ratio as it would be added to the non-current liabilities in the calculation of the ratio.
- The company is committed to pay out preference share dividend at a stated rate, no matter the profitability is high or not.
- Other methods, e.g. issuing debentures, can raise capital but would lead to higher capital gearing ratio, so should not be considered.

(1 mark for each relevant point, max. 2 marks)

(3)

5. AL2010.Q4(A)(B) (Modified, added share premium to general reserve)

(A)(a) Dividend cover measures the number of time annual ordinary dividend is covered by annual profit attributable to ordinary shareholders. 1

Interpretation: The higher the ratio, the more likely that the dividend can be maintained in the future. 1

(b) Limitation of ratio analysis: 3

- Misleading results if the underpinning financial information is poor, e.g. poor estimation on depreciation and allowance for doubtful debts.
- Timeliness of information: ratio is based on past financial information, however, past performance of a firm does not necessarily indicate its future performance.
- Different judgment on the accounting policies to be used for certain transactions. With different accepted accounting policies used for the same transaction by different companies, it is difficult to compare and draw conclusion on their performance.
- Ratios can only identify the symptoms, but not the causes. Different interpretations can be drawn by different people.
- Adhere to the money measurement concept, non-monetary but significant items, such as quality of goods, management, the diversity of product, could not be reviewed.

(1 mark each, max 3 marks)

(B)(a) **Earnings per share**: (EPS)

= ($2 950 000 - $4 000 000 x 8%)/($12 000 000/$2)

= $0.44 per share 1

(b) **Price-earnings (P/E) ratio**

= $5/ $0.44

= 11.36 1

Or

$5/{($2 950 000 - $4 000 000 x 8%)/($12 000 000/$2)}

= 11.41

(c) **Dividend cover**

($2 950 000 - $320 000)/($12 000 000/$2 x $0.2)

= 2.19 times 1

(3)

1. SP.P1B.Q6

Mr Chan is the owner of a furniture manufacturing and trading business. Most of the furniture was manufactured by his own factory in Hong Kong and the rest was purchased from several manufacturers in Shenzhen.

The following are the financial ratios of the business for the year ended 31 December 20X6:

	Business	Industry average
Turnover	$1 250 000	$1 300 000
Gross Profit ratio	38%	60%
Net profit ratio	6%	42%
Current ratio	2.8:1	2.3:1
Liquid ratio	0.8:1	1.2:1

(a) Suggest two reasons why the gross profit ratio and net profit ratio of Mr Chan's business are much lower than the industry averages. (4 marks)

(b) Comment on the liquidity of Mr Chan's business in 20X6. (4 marks)

2. SP.P2A.Q8(b)(c)(d) (modified)

Good Prospect Limited commences its business on 1 January 20X6 and has made a net profit of $3 000 000 for the year ended 31 December 20X6. However, the company experienced problems in getting $1 800 000 to finance the acquisition of a plant in Tai Po for expansion.

As at 31 December 20X6, the long-term financing of Good Prospect Limited was as follows:

	$'000
Capital and reserves	
200 000 Ordinary shares of $10 each	2 000
150 000 12% Preference shares of $10 each	1 500
Retained profits	1 600
	5 100

After studying the information above, Mok, the executive director, proposed the following alternatives to finance the acquisition of the plant:

Alternative 1: To issue 100 000 ordinary shares at $18 per share. The annual ordinary dividend will remain at 20% on the net profit available for distribution to ordinary shareholders.

Alternative 2: To issue $1 800 000 8% debentures (repayable in June 20Y2) at par, payable in full on application. Debenture interest is payable twice a year on 1 January and 1 July.

Alternative 3: To purchase the plant on credit. The terms of agreement provide for five annual payments of $480 000, commencing at the end of the first year. Assume that interest accrues evenly over the credit period

It was estimated that following this expansion, the profit before interest for the first financial year would amount to $3 600 000.

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(b) Calculate the gearing ratio under each alternative immediately after the acquisition. (3 marks)

(c) Calculate the earnings per share under each alternative for the first financial year after the expansion. (Note: Ignore taxation.) (3 marks)

(d) Based on your answer in (b) and (c), evaluate the above three financing alternatives from the perspective of shareholders. (6 marks)

3. PP.P1B.Q2

Glassy Ltd and Pearl Ltd are competitors in the same industry. Based on the following information, comment on the liquidity of Glassy Ltd in 2011. (6 marks)

	Glassy Ltd	Pearl Ltd	Industrial Average
Current ratio	2.8:1	2.0:1	1.9:1
Quick ratio	1.0:1	1.1:1	1.0:1

4. PP.P2A.Q3(a)

Easy Company makes all purchases and sales on credit. The following balances of the company as at 31 December 2011 were extracted:

		$
Sales		10 186 000
Purchases		7 294 500
Inventory –	as at 1 January 2011	878 000
	as at 31 December 2011	990 000
Trade receivables –	as at 1 January 2011	856 000
	as at 31 December 2011	996 000

REQUIRED:

(a) Calculate (to one decimal place) the following accounting ratios for 2011:

(1) trade receivables collection periods (in months) (1 mark)

(2) inventory turnover (2 marks)

5. 2013.Q7 [Note: Part (b)(ii) is out-of-syllabus since 2017DSE]

The balances of Able Company as at 31 December were as follows:

	2011	2012
	$	$
4% Long-term loans	67 000	120 000
8% Short-term loans	23 100	60 000
Accounts payables	43 300	100 200
Accounts Receivables	37 500	85 864
Bank overdraft	-	15 000
Cash at bank	32 020	-
Cash in hand	200	500
Inventory	79 680	162 936
$5 Ordinary share, fully paid	155 000	155 000
Property, plant and equipment, net	254 000	333 622
Retained profits	115 000	132 722

Additional information:

(i) All sales were made on credit.

(ii) On 31 December 2010. Inventory and accounts receivables were $88 320 and $37 260 respectively.

(iii) Total sales amount shown in the sales journal for 2011 and 2012 amounted to $454 790 and $625 942 respectively. Gross profit was $96 110 for 2011 and $230 191 for 2012. However, it was then discovered that a sales invoice of 2012 for $14 000 had been omitted from the records of the books.

(iv) There had been no change in share capital since 2010. The balance of the retained profits at 31 December 2010 was $69 521.

(v) In 2011 and 2012, no tax expenses were incurred and no dividend was declared.

REQUIRED:

(a) Calculate (to two decimal places) the following ratios for 2011 and 2012 (assume 365 days per year)

(i) Current ratio

(ii) Liquid ratio

(iii) Day's sales in accounts receivables

(iv) Inventory turnover (in times)

(v) Net profit ratio

(vi) Earnings per share (14 marks)

(b) Based on the ratio calculated in (i) above,

(i) Briefly comment on the profitability of Able Company for the year 2012. (3 marks)

(ii) *[Out-syl]* Suggest three ways to improve the liquidity of Able Company. (3 marks)

(Total: 17 marks)

6. 2014.P2A.Q6(b)

Although accounting ratios are useful tools in financial analysis, there are limits to their usefulness. State two of these limitations. (2 marks)

7. 2015.Q9

Pearl Ltd had the following financial information related to the year 2014:

As at 1 January 2014	$
Shareholders' equity	300 000
Retained profits	40 000
Total assets	343 000
Non-current assets	101 000
Inventory	65 000
Current liabilities (Note (i))	43 000

For the year ended 31 December 2014	$
Cash sales	60 000
Credit sales	390 000
Cash purchases	110 000
Credit purchases	132 000
Increase in current assets (not including inventory)	27 000
Increase in trade payables	3 000

The retained profits as at 31 December 2014 amounted to $128 000 and no profit appropriations were made during the year.

(i) Pearl Ltd had trade payables only as its current liabilities.

(ii) An electricity bill for December 2014 amounting to $2500 was received on 16 January 2015. As the payment would be made in February 2015, no accounting record has been made by the bookkeeper.

(iii) A physical inventory count on 4 January 2015 showed that the value of inventory on that date was $31 700, which had been used for the computation of profits for the year 2014. During the period 1 January to 4 January 2015, there were credit purchases with a total list price of $3000. A trade discount of 10% has been given by the supplier on these purchases and a 2% cash discount would be received if the settlement was made in two weeks. Goods costing $5000 were sold during these 4 days.

REQUIRED:

(a) Identify the relevant accounting principle or concept violated in (ii) above. Briefly explain. (3 marks)

(b) Calculate the following amounts at 31 December 2014:

(i) Inventory (2 marks)

(ii) current assets (3 marks)

(c) Calculate (to two decimal places) the following ratios for the year 2014:

(i) net profit ratio (2 marks)

(ii) quick ratio (2 marks)

(iii) trade payables turnover (in times) (2 marks)

(iv) inventory turnover (in times) (2 marks)

(Please turn to next page for part (d))

Lily Ltd and Jasmine Ltd are two listed companies in the same industry and have a similar scale of production. They have a similar price. Their financial ratios for the year ended 2014 are shown below:

	Lily Ltd	Jasmine Ltd
Return on capital employed	31%	15%
Gearing ratio	25%	65%
Earnings per share	$18	$15.2

REQUIRED:

(d) Pearl Ltd is planning to invest a designated amount of cash, for the same percentage of shareholding, in one of the above companies. Advise and explain which company Pearl Ltd should invest in based on the three ratios above. (4 marks)

(Total: 20 marks)

Based on the following information, answer 2016.P1B.Q4(a)(b) and Q5(a)(b)

John runs a small supermarket. Its financial statements for the year 2015 are given below:

Income statement for the year ended 31 December 2015

	$
Sales	100 000
Less: Cost of goods sold	60 000
Gross profit	40 000
Less: General expenses	30 000
Net profit	10 000

Statement of financial position as at 31 December 2015

	$	$
Non-current assets		20 000
Current assets		
Inventory	34 000	
Cash	6 000	
	40 000	
Less: Current Liabilities		
Trade payables	30 000	10 000
		30 000
Capital, 1 January 2015		37 000
Add: Net profit		10 000
		47 000
Less: Drawings		17 000
		30 000

BAFS – Accounting Ratios / Financial analysis (Sample Paper – 2021)

8. 2016.P1B.Q4(a)(b)

4(a) Calculate (to two decimal places) the following ratios for the year 2015 for John's supermarket:
- (i) Gross profit ratio
- (ii) Net profit ratio
- (iii) Return on capital employed

(3 marks)

(b) Man Kee is another small supermarket in the same district. Its gross profit ratio and net profit ratio for the year 2015 are 35% and 15% respectively. Briefly comment on the profitability of John's supermarket for the year 2015 as compared with Man Kee. (2 marks)

9. 2016.P1B.Q5(a)(b)

5(a) Calculate (to two decimal places) the following for the year 2015 for John's supermarket:
- (i) Working capital
- (ii) Current ratio
- (iii) Liquid ratio

(3 marks)

(b) Briefly comment on the liquidity of John's supermarket as at 31 December 2015. (2 marks)

10. 2018.P2A.Q5

The account balances of Rocky Company Limited as at 31 December 2016 and 31 December 2017 are given below:

	2016	2017
	$	$
3% Long-term loan	753 800	180 000
5% Short-term loan	--	90 000
Accrued expenses	8 200	15 000
Cash at bank	33 500	128 000
Equipment, net	782 000	663 000
Inventory (31 December)	136 500	364 000
Ordinary share capital	200 000	700 000
Retained profits (31 December)	42 000	158 000
Trade payables	58 000	202 000
Trade receivables	110 000	190 000

Additional information:

(i) All sales were made on credit and total sales for the year 2017 were $780 000. Some goods were sent on a sale-or-return basis at a price of $17 000 in December 2017 and were recorded as credit sales. On 31 December, all these goods were returned by the customer and were included in the closing inventory of the company, but no entries were made in respect of this return.

(ii) Total purchases for the year 2017 amounted to $778 050, of which 80% were credit purchases and 20% were cash purchases.

REQUIRED:

(a) Calculate (to two decimal places) the following ratios for 2017 (365 days a year)

(i) Working capital ratio

(ii) Inventory turnover (in times)

(iii) Average trade receivables collection period (in days)

(iv) Average trade payables repayment period (in days)

(8 marks)

(b)(i) Calculate (to two decimal places) the gearing ratios of Rocky Company Limited for 2016 and 2017. (2 marks)

(ii) Comment on the solvency of Rocky Company Limited for 2017. (3 marks)

(Total: 13 marks)

BAFS – Accounting Ratios / Financial analysis (Sample Paper – 2021)

Refer to the below information, answer 2019.P1B.Q4 or 2019.P1B.Q5.

Au's firm manufactures and sells garments. The following account balances were extracted from the books of Au's firm as at 31 December 2018:

	$
Sales	2 300 000
Inventory, 31 December 2018	100 000
Gross profit for the year	1 495 000
Net profit for the year	345 000
Capital, 1 January 2018	1 827 500
Machinery	2 182 500
Cash at bank	140 000
Trade payables	250 000

In 2017, the return on capital employed and the current ratio of Au's firm were 25% and 1.4:1 respectively. In 2018, additional capital was not introduced and there were no drawings.

11. 2019.P1B.Q4

(a) Calculate the following ratios for 2018 for Au's firm (to two decimal places):

(i) Gross profit ratio (1 mark)

(ii) Net profit ratio (1 mark)

(iii) Return on capital employed (2 marks)

(b) Based on the return on capital employed, briefly comment on the profitability of Au's firm in 2018. (1 mark)

12. 2019.P1B.Q5

(a) Prepare a statement of financial position of Au's firm as at 31 December 2018. (3 marks)

(b) Based on the current ratio (to two decimal places), briefly comment on the liquidity of Au's firm as at 31 December 2018. (2 marks)

13. 2019.P2A.Q1

Fancy Limited's financial information for 2018 and 2017 is as follows.

	2018
	$
Sales (cash sales $11 600)	298 200
Cost of sales	210 700
Operating expenses	43 600

Balances at 31 December	2018	2017
	$	$
Non-current assets, net	144 800	145 300
Inventory	153 500	86 400
Trade receivables	95 300	58 200
Current liabilities	125 900	70 400
Ordinary share capital	70 000	70 000
Retained profits	124 800	80 900
5% long-term bank loan	95 000	95 000
Cash at bank	22 100	26 400

REQUIRED:

(a) Calculate (to two decimal places) the following ratios for 2018:

(i) inventory turnover (in times)

(ii) trade receivables turnover (in times)

(iii) total assets turnover (in times)

(iv) gearing ratio

(Total: 8 marks)

14. 2020.P2A.Q5

Johnny Limited's financial year ends on 31 December each year. Information for 2019 is as follows:

		$
Net profit after tax		80 200
Dividend declared and paid for 2019:	Ordinary shares	13 500
	Preference shares	8 000
Balances as at 1 January 2019		
Retained profits		210 000
General reserve		100 000
Balances as at 31 December 2019		
Current liabilities		129 580
3% Debenture, repayable in 2025		280 000
45 000 Ordinary share capital		900 000
20 000 4% Preference share capital		200 000
General reserve		100 000

REQUIRED:

(a) Prepare a statement to calculate the shareholders' funds as at 31 December 2019. (4 marks)

(b) Calculate (to two decimal places) the following ratios for 2019:

(i) Gearing ratio (2 marks)

(ii) Earnings per share (2 marks)

(iii) Dividend cover for ordinary shares (in times) (2 marks)

(c) Johnny Limited plans to raise $1 million by long-term financing without deteriorating its solvency. Suggest, with explanation, one financing method Johnny Limited should use. (2 marks)

(Total: 12 marks)

15. 2021.P1.Q4(A)

(A) Chan Kee is a shop selling household products. The account balances as at 31 December 2020 extracted from its books were as follows:

	$
Bank loan (due in March 2021)	30 000
Bank	20 000
Fixed deposit (for 6 months)	50 000
Inventory	180 000
Trade payables	100 000
Trade receivables	120 000

In 2020, the industry averages of the working capital ratio and acid test ratio were 1.9:1 and 1.0:1 respectively.

(a) Calculate (to two decimal places) the following ratios for 2020 for Chan Kee:
(i) Working capital ratio
(ii) Acid test ratio (2 marks)
(b) Briefly comment on the liquidity of Chan Kee on 31 December 2020. (3 marks)

P1B: Paper 1B of HKDSE BAFS (Short Questions of Compulsory Part)
P2A: Paper 2A of HKDSE BAFS (Accounting Elective)

1. 2013.Q7

(a)

	2011	2012	
(i) Current ratio	$\frac{\$79\ 680 + \$37\ 500 + \$32\ 020 + \$200}{\$43\ 300 + \$23\ 100}$ = 2.25 : 1	$\frac{\$162\ 936 + (\$85\ 864 + \$14\ 000) + \$500}{\$100\ 200 + \$60\ 000 + \$15\ 000}$ = 1.50 : 1	2½
(ii) Liquid ratio	$\frac{\$37\ 500 + \$32\ 020 + \$200}{\$43\ 300 + \$23\ 100}$ = 1.05 : 1	$\frac{(\$85\ 864 + \$14\ 000) + \$500}{\$100\ 200 + \$60\ 000 + \$15\ 000}$ = 0.57 : 1	2
(iii) Days' sales in accounts receivables	$\frac{(\$37\ 500 + \$37\ 260) / 2}{\$454\ 790} \times 365$ days = 30.00 days	$\frac{(\$37\ 500 + \$85\ 864 + \$14\ 000) / 2}{\$625\ 942 + \$14\ 000} \times 365$ days = 39.17 days	2½
(iv) Inventory turnover (in times)	$\frac{\$454\ 790 - \$96\ 110}{(\$79\ 680 + \$88\ 320) / 2}$ = 4.27 times	$\frac{(\$625\ 942 + \$14\ 000) - (\$230\ 191 + \$14\ 000)}{(\$79\ 680 + \$162\ 936) / 2}$ = 3.26 times	2½
(v) Net profit ratio	$\frac{\$115\ 000 - \$69\ 521}{\$454\ 790} \times 100\%$ = 10.00%	$\frac{(\$132\ 722 + \$14\ 000) - \$115\ 000}{\$625\ 942 + \$14\ 000} \times 100\%$ = 4.96%	2½
(vi) Earnings per share	$\frac{\$115\ 000 - \$69\ 521}{31\ 000 \text{ shares}}$ = \$1.47 per share	$\frac{(\$132\ 722 + \$14\ 000) - \$115\ 000}{31\ 000 \text{ shares}}$ = \$1.02 per share	2

(14)

(b)(i)
Profitability of 2012 was worsen than 2011 — 1
Other comments: — Max: 2
- net profit ratio dropped substantially from 10% to 4.96%.
- this might be the result of poor control over the operating expenses
- earnings per share, which is a yardstick for the performance of the company, was decreased by $0.45

(1 mark for each relevant comment, max. 2 marks)

(3)

2022

2. Jacky commenced a trading business on 1 January 2020. On that day, office equipment was acquired for \$980 000. The office equipment is to be depreciated using the straight-line method at a rate of 10% per annum.

All sales and purchases are made on a credit basis. On 1 January 2021, the amount due from customers was \$45 000. The statement of financial position as at 31 December 2021 includes the following items only and the balances of some accounts were confirmed as below:

	\$
Office equipment	980 000
Accumulated depreciation – office equipment	?
Trade receivables	?
Inventory	159 750
Bank	22 000 (Cr)
Trade payables	?
Capital, 1 January 2021	500 000
Net profit	?
Long-term bank loan	?

Additional information for 2021:

Working capital, 31 December 2021	\$66 000
Net sales for the year	\$600 000
Net profit ratio	30%
Trade receivables turnover	12 times
Gearing ratio	20%

REQUIRED:

Prepare a statement of financial position as at 31 December 2021. (8 marks)

(Total: 8 marks)

(ii) Out-of DSE syllabus, for reference only.

Ways:

- **better control over the level of inventory kept** 3
- **tighten credit policy so as to shorten its collection period from customers**
- **increase cash discounts to attract early settlement from customers**
- **issue shares instead of making loans and bank overdraft**

(1 mark for each relevant way, max. 3 marks) (3)

2. 2015.Q9

(a)

- Accrual concept is violated. 1
- Revenues and expenses are recognised and included in the financial statements when they are earned or incurred, not when they are received or paid. 1
- Therefore, the electricity expenses should be recorded in the financial statements of 2014, though it was still unpaid at the year end. 1

(3)

(b)(i)

Inventory

$= \$31\,700 - (\$3000 \times 0.9) + \$5000$

$= \$34\,000$ 2

(b)(ii)

Current assets

$= (\$343\,000 - \$101\,000) + \$27\,000 - (\$65\,000 - \$34\,000)$

$= \$238\,000$ 3

(c)(i)

Net profit ratio:

$= \dfrac{[(\$128\,000 - \$40\,000) + (\$34\,000 - \$31\,700) - \$2500] \times 100\%}{390\,000 + 60\,000}$

$= \dfrac{\$87\,800 \times 100\%}{\$450\,000}$

$= 19.51\%$ 2

(c)(ii)

Quick ratio:

$= \dfrac{\$238\,000 - \$34\,000}{\$43\,000 + \$3000 + \$2500}$

$= \dfrac{\$204\,000}{\$48\,500}$

$= 4.21:1$ 2

(c)(iii)

Trade payables turnover (times)

$= \dfrac{\$132\,000}{(\$43\,000 + \$46\,000)/2}$

$= \dfrac{\$132\,000}{\$44\,500}$

$= 2.97$ times 2

(c)(iv)

Inventory turnover (times)

$= \dfrac{\$65\,000 + (\$110\,000 + \$132\,000) - \$34\,000}{(\$65\,000 + \$34\,000)/2}$

$= \dfrac{\$273\,000}{\$49\,500}$

$= 5.52$ times 2

(13)

(d)

- Pearl Ltd should invest in Lily Ltd. 1

Lily Ltd is a better investment because it has

- higher return on capital employed: it has higher profitability with more efficient use of its capital to generate profits. 1
- Lower gearing ratio: It has lower degree of leverage and hence lower risk and financial burden. 1
- Higher earnings per share: it has higher profitability and the amount of profits earned for each outstanding share is higher. 1

(4)

3. SP.P1B.Q6

(a) Reasons:

- relatively low selling price
- relatively high production cost
- operating costs are high / control on operating costs is ineffective

(2 marks for each relevant reason, max. 4 marks)

(b) Words in this format are from the marking scheme, *words in italics are explanations.*

- The liquidity of the business is **worse** than the industry average *as shown by a lower liquid ratio*
- There are **not sufficient liquid assets** to meet its immediate debts *as the liquid ratio is lower than 1:1*
- Too much capital is tied up in stock *as shown by a significant difference between the current ratio (2.8:1) and the liquid ratio (0.8:1)*

(2 marks for each relevant comment, max. 4 marks)

4. SP.P2A.Q8(b)(c)(d) (modified)

(b)

Gearing ratio:

Alternative 1

1500/ (5100 + 1800) = 21.74% 1

Alternative 2

(1500 + 1800) / (5100 + 1800) = 47.83% 1

Alternative 3

(1500 + 1440) / (5100 + 1440) = 44.95% 1

(3)

(c)

Earnings per share:

Alternative 1

(3600 – 180)/300 = $11.4 per share 1

Alternative 2

(3600 – 144 – 180)/200 = $16.38 per share 1

Alternative 3

(3600 – 120 – 180) / 200 = $16.5 per share 1

(3)

(d)

Gearing position: Max. 3

- Capital gearing depicts the relationship between equity capital and fixed-interest loan capital (including preference share capital).
- Among the three alternatives, Alternative 1 is less geared (only 21.74% capital was loan capital) than that of Alternatives 2 and 3 (more than 40% capital was loan capital)
- Interest has to be paid half-yearly under Alternative 3 and Alternative 3 requires an annual repayment of 20% of the liability.
- Overall, shareholders bear lower risk under Alternative 1.

Return to shareholders: Max. 3

- Under all three alternatives, the return to long-term capital employed included preference dividend and ordinary dividend.
- Both Alternative 2 and 3 impost interest burden on the company and can weaken the company's profitability and liquidity position. Shareholders may suffer if the estimated profit is not attained.
- Based on the earnings per share, ordinary shareholders will benefit from the highly geared position under Alternatives 2 and 3.

5. PP.P1B.Q2

Current ratio of Glassy Ltd is higher than that of Pearl Ltd which indicates its greater ability to meet short-term obligations. (1)

Quick ratio of Glassy Ltd is lower than that of Pearl Ltd which means it is less able to pay its immediate debt. (1)

However, as the current ratio of Pearl Ltd is more comparable to the industrial average, the higher current ratio of Glassy Ltd might imply its inability of using available resources to grasp investment opportunity. (2)

Besides, the significant difference between the quick ratio and current ratio of Glassy Ltd as compared with Pearl Ltd might imply Glassy Ltd is tied up with excessive inventories or other repayments. (2)

6. PP.P2A.Q3(a)

(1) Trade receivables collection periods $= \dfrac{(\$856\ 000 + \$996\ 000)/2}{\$10\ 186\ 000} \times 12$ months 1

$= 1.1$ months

(2) Inventory turnover $= \dfrac{\$7\ 182\ 500\ \text{(W1)}}{(\$878\ 000 + \$990\ 000)/2} = 7.7$ times 2

(W1) Cost of goods sold $= \$878\ 000 + \$7\ 294\ 500 - \$990\ 000$

$= \$7\ 182\ 500$

7. 2014.P2A.Q6(b)

- Accounting ratios are calculated based on historical cost and hence may not fairly reflect current performance.
- Accounting ratios are calculated based on past financial information. Past performance of a company does not necessarily indicate its future performance.
- Accounting ratios are affected by accounting estimates. Differences in accounting policies will hinder inter-company comparisons.
- Accounting ratios can only identify the symptoms, but not the cause. They are not able to provide any suggestions or advice to solve the existing or future problems.
- Non-monetary but significant items, such as the quality of the products, leadership of the management and the business environment, are ignored.

(1 mark for each relevant limitation, max. 2 marks)

8. 2016.P1B.Q4(a)(b)

(a)(i) Gross profit ratio = $40 000 / $100 000 x 100% = 40% 1

(ii) Net profit ratio = $10 000 / $100 000 x 100% = 10% 1

(iii) Return on capital employed = $10 000 / [($30 000 + $37 000)/2] x 100% = 29.85% 1

(b) John's supermarket:

- Has higher gross profit ratio but lower net profit ratio 1
- Is poor in controlling expenses / administrative arrangements 1

9. 2016.P1B.Q5(a)(b)

(a)(i) Working capital = $40 000 - $30 000 = $10 000 1
(ii) Current ratio = $40 000 / $30 000 = 1.33:1 1
(iii) Liquid ratio = $6000/$30 000 = 0.20:1 1
(b) The liquidity of John's supermarket is poor due to the low current ratio and liquid ratio 1
- It has difficulty meeting its immediate debts
- Its current assets are tied up in inventory Max. 1

(1 mark for each relevant point, max. 1 mark)

10. 2018.P2A.Q5

(a) (i) Working capital ratio

2017: $\dfrac{\$364\,000 + (\$190\,000 - \$17\,000) + \$128\,000}{\$202\,000 + \$15\,000 + \$90\,000} = \dfrac{\$665\,000}{\$307\,000}$ = 2.17:1 2

(ii) Inventory turnover

2017: $\dfrac{\$136\,500 + \$778\,050 - \$364\,000}{(\$136\,500 + \$364\,000)/2} = \dfrac{\$550\,550}{\$250\,250}$ = 2.20 times 2

(iii) Average trade receivables collection period

2017: $\dfrac{(\$110\,000 + \$190\,000 - \$17\,000)/2}{\$780\,000 - \$17\,000} \times 365 = \dfrac{\$141\,500}{\$763\,000} \times 365$ = 67.69 days 2

(iv) Average trade payables repayment period

2017: $\dfrac{(\$58\,000 + \$202\,000)/2}{\$778\,050 \times 80\%} \times 365 = \dfrac{\$130\,000}{\$622\,440} \times 365$ = 76.23 days 2

(8)

(b) (i) Gearing ratio

2017: $\dfrac{\$180\,000}{\$180\,000 + \$700\,000 + \$(158\,000 - \$17\,000)} \times 100\% = \dfrac{\$180\,000}{\$1\,021\,000} \times 100\%$ = 17.63% 1

2016: $\dfrac{\$753\,800}{\$753\,800 + \$200\,000 + \$42\,000} \times 100\% = \dfrac{\$753\,800}{\$995\,800} \times 100\%$ = 75.70% 1

(b)(ii) Comment:
- The solvency has improved in 2017 1
- The company issued ordinary share capital during 2017 1
- The company repaid a large portion of long-term loan during 2017 2

(1 mark for each relevant comment, max. 2 marks) (3)

13 marks

Marking notes for 2018Q5:

- **General comment (1) + Rationale (2)**
- **General comment**

General comment – accepted (1 mark)	**General comment – not accepted (no mark)**
The solvency has improved in 2017	Good solvency in 2017
The solvency position was good in 2017 with that of 2016's	Low geared
The business has become less risky in paying non-current liabilities	

- **Rationale**

✓ **Complete answer:** The company issued ordinary share capital (1) to repay long term loan in 2017 (1)

- The following answers are incomplete -> 1 mark

Incomplete rationale, 1 mark	**Rationale – not accepted (no mark)**
The company had more shareholders' fund in 2017	The company had large amount of capital in 2017
The company had less portion of non-current liabilities in 2017	The company had small amount of non-current liabilities in 2017

11. 2019.P1B.Q4(a)(b)

(a)(i) Gross profit ratio = $1 495 000 / $2 300 000 x 100% = 65.00% or 65% or 0.65 1

(ii) Net profit ratio = $345 000 / $2 300 000 x 100% = 15.00% or 15% or 0.15 1

(iii) Capital as at 31 December 2018 = $1 827 500 + $345 000 = $2 172 500 2
Average capital = ($1 827 500 + $2 172 500) / 2 = $2 000 000
Return on capital employed = $345 000 / $2 000 000 = 17.25%
or 0.1725 or 0.1725:1 or 17% (1.5)

or $\dfrac{345{,}000 \times 100\%}{2{,}172{,}500}$ 0.5 / 0.5

(b) As compared with 2017, Au's firm was relatively less efficient in using its owners' capital to generate profits in 2018. 1

Marking notes – Q4(b)

- Answer should include the following 3 parts:
  - In using its owners' capital 運用東主資本
  - To generate profit 產生利潤
  - Relatively less efficient 效率相對較低

Answers not accepted:

× poor expense management 費用管理不善/ too much expenses 費用過多
× lower profit 盈利下降, lowered/reduced/decreased profitability 盈利能力下降
× lower Return on Capital Employed 較低運用資金報酬率

12. 2019.P1B.Q5(a)(b)

Au's firm
Statement of financial position as at 31 December 2018

	\$	\$	\$	
Non-current assets				
Machinery			2 182 500	0.5
Current assets				
Inventory		100 000		0.5
Cash at bank		140 000		0.5
		240 000		
Less: Current liabilities				
Trade payables		250 000	(10 000)	0.5
			2 172 500	
Financed by:				
Capital, as at 1 January 2018			1 827 500	0.5
Add: Net profit			345 000	0.5
			2 172 500	(3)

(b) Current ratio = \$240 000 / \$250 000 = 0.96:1 1

Comments:
- the current ratio is lower than 1:1; the firm may have difficulty in repaying its short-term debts. 1
- as compared with 2017, the liquidity of the firm was poorer due to its lower current ratio
(1 mark for each relevant comment, max. 1 mark)

Marking notes – Q5

Part (a)
- T-form is accepted [(NCA + CA) on LH side, (Capital + CL) on RH side]
- **CA + CL** or **Capital – CL** → 0 mark for CL
- (NCA + CA) – CL = Capital → 0 mark for CL
- CL without 'less' OR a bracket to indicate minus → 0 marks
- Items under no/abbreviated subheading → first item being the respective category
- Items under wrong subheading → 0 marks
- All assets/liabilities items under **Assets/Liabilities** will be treated as under NCA/NCL
- No marks for items duplicated, e.g. same item under NCA and CA (0 mark for both items)
- No marks for abbreviation, e.g. Capital, bal as at 1 Jan 18, opening capital X, (Net) Profit

Part (b)
- 0.96 ✓ (1)
- Wrong answer BUT correct workings (0.5)
- Did not calculate current ratio of 2018 / comment based on the ratio of 2017 (0)

13. 2019.P2A.Q1

(a) Inventory turnover:
存貨周轉率（次）

$$\frac{\$210\ 700\ (0.5)}{(\$153\ 500 + \$86\ 400) / 2\ (1)} = \frac{\$210\ 700}{\$119\ 950} = 1.76 \text{ times 次}$$ 2

(b) Trade receivables turnover (in times)
應收貨款周轉率（次）

$$\frac{\$298\ 200 - \$11\ 600\ (0.5)}{(\$95\ 300 + \$58\ \ 200) / 2\ (1)} = \frac{\$286\ 600}{\$76\ 750} = 3.73 \text{ times 次}$$ 2

(c) Total assets turnover (in times)
總資產周轉率（次）

$$\frac{\$298\ 200\ (0.5)}{\$144\ 800 + \$153\ 500 + \$95\ 300 + \$22\ 100} = \frac{\$298\ 200}{\$415\ 700} = 0.72 \text{ times 次}$$ 2

0.5 mark for any 2 correct figures
任何 2 個正確數字得 0.5 分 (1)

(d) Gearing ratio 槓桿比率：

$$\frac{\$95\ 000\ (0.5)}{\$95\ 000\ (0.5) + (\underline{\$70\ 000 + \$124\ 800}\ (0.5))} = \frac{\$95\ 000}{\$289\ 800} = 32.78\% / 0.33$$ 2

8 marks

Supplementary marking notes for 2019.P2A.Q1(a)
- Answer correct, no need to trace workings
- Missing unit, e.g. days, times, %
  if given in the question, no mark deducted
- Wrong unit used
  no mark for the answer, check workings

14. 2020.P2A.Q5

(a)

Statement to calculate the shareholders' funds as at 31 December 2019

	$	$	
Ordinary share Capital		900 000	0.5
4% Preference Share Capital		200 000	0.5
		1 100 000	
General reserves		100 000	0.5
		1 200 000	
Retained profits as at 1 January 2019	210 000		
Add: Net profit after tax	80 200		
	290 200		
Less: Dividend for 2019 ($13 500 + $8 000)	21 500		
Retained profits as at 31 December 2019		268 700	2
Shareholders' funds as at 31 December 2019		**1 468 700**	0.5
			(4)

(b)(i) Gearing ratio:

= (Non-current liabilities + Preference share capital) / (Non-current liabilities + Shareholders' funds) x 100%

$$= \frac{(\$280\ 000 + \$200\ 000)}{(\$280\ 000 + \mathbf{\$1\ 468\ 700})} \times 100\% \qquad 2$$

= 27.45%

(ii) earnings per share:

= (Net profit after tax - Preference Dividend) / Number of ordinary shares issued

$$= \frac{(\$80\ 200 - \$8\ 000)}{45\ 000}$$

= $1.60 — 2

Dividend cover for ordinary shares:

= (Net profit after tax - Preference Dividend) / Ordinary dividend

$$= \frac{(\$80\ 200 - \$8\ 000)}{13\ 500}$$

= 5.35 times — 2

(6)

(c) Financing method:
- issue of ordinary share — 1

Explanation:
- this will lower the gearing ratio and the solvency of the company will be enhanced — 1
- as there is no need to repay the issued ordinary share capital, the solvency of the company will not deteriorate

(1 mark for each relevant explanation, max. 1 mark)

(2)

12 marks