ACCOUNTING AND FINANCE

ATAR YEAR 12

2017

MARKING GUIDE

SECTION ONE: MULTIPLE-CHOICE

1	c)	8	c)	15	c)
2	c)	9	b)		
3	d)	10	d)		
4	a)	11	b)		
5	b)	12	b)		
6	c)	13	a)		
7	a)	14	a)		

(Total marks = 15)

SECTION TWO : SHORT ANSWERS Marks

QUESTION 16

a)

Payback period: 3 years 5.14 months

WORKINGS:

Year	Cash flow	Balance at end	
0	(960 000)	(960 000)	*½*
1	280 000	(680 000)	*1*
2	280 000	(400 000)	*1*
3	280 000	(120 000)	*1*
4	120 000	-	*1*

Year 4 120000/280000 x 12 months = 5.14 **OR**
960000/280000 = 3.42857
0.42857 x 12 = 5.14 months

Net present value: $259 456

WORKINGS:

Year	Cash flow	Factor *	NPV	
0	(960 000)	1	(960 000)	*½*
1	280 000	0.9091	254 548	*½*
2	280 000	0.8264	231 392	*½*
3	280 000	0.7513	210 364	*½*
4	280 000	0.6830	191 240	*½*
5	280 000	0.6209	173 852	*½*
6	280 000	0.5045	158 060	*½*
	TOTAL		259 456	

OR

(280000 x 4.3553*) – 960000 = 1219456 – 960000 = 259484 (3 ½)

* *Factors derived from tables in Specifications booklet*

(Total marks = 8)

b) Use of methods of evaluation:

The payback method is used to show how long it will take for the expenditure on the project to be recovered. It therefore assesses the risk aspect of the project. It also takes 1
into consideration the cash flow needs of the business 1
NPV does take account of changes in the time value of money and shows what the return will be, in present day dollars over the asset's life. 1
As far as the payback evaluation is concerned, there needs to be some kind of benchmark against which to measure the result e.g payback is required in less than 1 *3 years or whatever the managers consider reasonable.*

Marks

With the NPV method, as long as the estimated NPV over the project's life is positive, nothing more is necessarily needed, although usually alternative investments will be considered, in which case the project with the highest NPV will be favoured. 1

(Total marks = 5)

c) Advantages & disadvantages:

The payback method is relatively objective and easy to calculate, and it does provide a risk assessment. However, it does not look at the return over the whole of the investment's life nor does it take account of the changing real value of money. 1 1

NPV does cover the whole of the investment's life and it does take into account changing real money values, but it does require some arbitrary assumptions about the discount rate to use which can significantly alter the result. 1 1

Without a benchmark or any other basis of comparison, it is difficult to evaluate the project from a payback point of view. As far as NPV is concerned, the project is estimated to generate a positive NPV and therefore should be proceeded with, all other things being equal. 1 1

(Total marks = 6)

d) CASH BUDGET FOR OCTOBER – DECEMBER 2017

	OCT	NOV	DEC	
Opening cash balance	113 000	269 200	405 380	*1 ½*
Receipts				
Retail sales	29 700	31 680	37 620	*3*
Wholesale sales	186 000	190 000	200 000	*1 ½*
Bank loan	400 000	400 000	-	*2*
Total cash available	728 700	890 880	643 000	*½*
Payments				
Accounts payable	103 000	104 000	106 000	*1 ½*
Wages	38 000	38 000	48 000	*1 ½*
Council rates	6 000	-	-	*1*
General office expenses	2 500	2 500	2 800	*1 ½*
Advertising	1 000	1 000	1 000	*1 ½*
Electricity	9 000	10 000	12 000	*1 ½*
Cost of expansion	300 000	330 000	330 000	*1 ½*
Total payments	459 500	485 500	499 800	*½*
Closing cash balance	269 200	405 380	143 200	*1*

(- 1 mark for each item incorrectly included e.g. depreciation, insurance)

(Total marks = 20)

WORKINGS:

	Month	**Total**	**Less 1%**	**Net**
Retail sales:	October	30 000	300	29 700 (1)
	November	32 000	320	31 680 (1)
	December	38 000	380	37 620 (1)

QUESTION 17 **Marks**

a) **GREENS LIMITED**

STATEMENT OF COMPREHENSIVE INCOME FOR YEAR ENDED 30/6/17

	$	
Sales	2 965 000	*1*
Cost of sales	924 000	*1*
Gross Profit	2 041 000	*½*
Expenses (excluding finance costs)	1 133 000	*3*
Finance costs	56 000	*1*
Profit before income tax	852 000	*½*
Income tax expense	255 600	*2*
Profit for the period	596 400	*½*
Other comprehensive income	400 000	*1*
Total Comprehensive Income	**996 400**	*½*

WORKINGS: *(Total marks = 11)*

Expenses: 62500+570000+45000+64500+108000+796000 = 1133000 (6 x ½ = 3)

Income tax: 852000 x 30% = 255600 (2)

b) **GREENS LIMITED**

STATEMENT OF FINANCIAL POSITION AS AT 30/6/17

	Notes	**$**	
Current assets			
Cash holdings		267 000	*2*
Accounts receivable		201 000	*1*
Inventories		935 000	*1*
		1 403 000	
Non-current assets			
Property, plant & equipment	1	3 733 000	*1*
		3 733 000	
Total assets		5 136 000	
Current liabilities			
Accounts payable		146 000	*1*
Income tax payable		255 600	*1*
Other liabilities		50 500	*1*
		452 100	
Non-current liabilities			
Borrowings		700 000	*1*
Total liabilities		1 152 100	
NET ASSETS		**3 983 900**	
Shareholders' equity			
Share Capital		2 500 000	*1*
Retained earnings		583 900	*4*
Other components of equity	2	900 000	*1*
		3 983 900	
Notes to the accounts			**Marks**
1 **Property, plant & equipment**			
Land, at valuation		2 200 000	*1*
Buildings, at cost		1 500 000	*1*
Accumulated depreciation		(245 000)	*1*

		1 255 000	
Plant & equipment, at cost		380 000	*1*
Accumulated depreciation		(102 000)	*1*
		278 000	
Property, plant & equipment, WDV		3 733 000	
2 **Other components of equity**			**Marks**
Asset revaluation reserve		400 000	*1*
General reserve		500 000	*1*
		900 000	

(Total marks = 22)

WORKINGS

Retained earnings:307500-200000-120000+596400 = 583 900 (4)

QUESTION 18

a) Overhead rate: $40.32 /assembly labour hour

WORKINGS

Overheads: 60000+260000+15000+48000 = 383000/9500 hours = $40.32/hour *2*

(Total marks = 2)

b) Standard cost: Nat-Pat : $ 810.28

N-P Plus: $ 1247.24

WORKINGS

Cost	Qty	$	Qty	$	
Timber @ $9/metre	**42 metres**	**378.00**	**60 metres**	**540.00**	*1+1*
Paint @ $25/litre	**2 litres**	**50.00**	**2.8 litres**	**70.00**	*1+1*
Bolts & other materials		**25.00**		**40.00**	*½ + ½*
Workshop labour @ $28/hour	**2 hours**	**56.00**	**2.5 hours**	**70.00**	*1+1*
Assembly labour @ $35/hour	**4 hours**	**140.00**	**7 hours**	**245.00**	*1+1*
Overheads $40.32/Ass.Lab.Hr	**4 hours**	**161.28**	**7 hours**	**282.24**	*1+1*
TOTAL		**810.28**		**1 247.24**	

(Total marks = 11)

c) Selling prices: Nat-Pat : $ 1053.36

N-P Plus: $ 1621.41

WORKINGS

810.28 x 130% = 1053.36 *1*

1247.24 x 130% = 1621.41 *1*

(Total marks = 2)

d) Contribution margins: Nat-Pat : $ 404.36 **Marks**

N-P Plus: $ 656.41

Weighted average: $ 505.18

WORKINGS

Variable costs: Nat-Pat 810.28 – 161.28 = 649 *1*

N-P Plus 1247.24 – 282.24 = 965 *1*

Nat-Pat 1053.36 – 649 = 404.36 *1*

N-P Plus 1621.41- 965 = 656.41 *1*
Weighted average: ((404.36 x 3) + (656.41 x 2))/ 5 = 505.18 *2*
(Total marks = 6)

e) Breakeven point: Sales $ 972 188

Nat-Pat units: 455

N-P Plus units: 304

WORKINGS

Sales at breakeven: 383000/505.18 = 758.1 units say 759. *1*
Sales mix 3/5 x 759 = 455 units Nat-Pat, 2/5 x 759 = 304 units N-P Plus *2*
Sales proceeds: (455 x 1053.36) + (304 x 1621.41) = 479279 + 492909 = 972188 *2*
(Total marks = 5)

f) Sales to achieve $120 000 profit: Nat-pat: 598 units

N-P Plus 398 units

WORKINGS:

Required contribution 383000 + 120000 = 503000/505.18 = 995.68 say 996 units *2*
996 x 3/5 = 598 units Nat-Pat, 996 x 2/5 = 398 units N-P Plus *2*
(Total marks = 4)

g) Direct & indirect costs:

Direct costs are those which can be directly identified with a unit of production, for example *1*
the timber used and the labour of the worker doing the assembly. *1*
Indirect costs are those that, although part of the production process, cannot be so identified, *1*
in this case such costs as administrative staff wages and delivery vehicle running costs *1*
(Total marks = 4)

QUESTION 19

a) LIBARNETT LIMITED

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30/6/2017

	$	$	
Cash flows from operating activities			
Receipts from customers	1 905 000		*3 ½*
Payments to suppliers & employees	(1 085 000)		*7*
Cash from operations	820 000		
Interest expense	(50 000)		*1*
Income tax expense	(213 000)		*1*
Cash flow from operating activities		557 000	
Cash flows from investing activities			**Marks**
Purchase of assets	(400 000)		*2*
Cash flow from investing activities		(400 000)	
Cash flows from financing activities			
Proceeds of share issue	500 000		*2*
Repayment of borrowings	(800 000)		*2*
Dividends paid	(250 000)		*1*
Cash flow from financing activities		(550 000)	
Net decrease in cash holdings for year		(393 000)	*½*

Cash holdings at start of year		160 000	½
Cash holdings at end of year		(233 000)	½

(Total marks = 21)

WORKINGS:

	A/c receivable			**A/c Payable**			
Balance	235000	*Cash*	*1905000[1½]*	*Cash*	*690000*	Balance	330000 *[1½]*
Sales	1980000	Bal.	310000 [2]	Bal.	480000	Purchase	840000 (2)
	2215000		2215000		1170000		1170000

	Other expenses			**Payments to suppliers etc:**	
Cash	*395000*	Accrued	50000 [1½]	A/c payable	690000 (3½)
Accrued	65000	P & L	410000 [2]	Other expenses	395000 (3½)
	460000		460000		1085000

Asset purchase: 2100000 – 1700000 = 400000 (2)
Share issues: 2000000 – 1500000 = 500000 (2)
Repaid debentures: 800000 – 0 = 800000 (2)

b) RATIOS

Ratio	2017	2016	
Working capital/current Current assets Current liabilities	720000 = 0.88 : 1 818000	805000 0.67 : 1 1210000	*2*
Quick asset/liquidity C/assets – stock & prepays C/liabilities – overdraft	720000-290000 =0.72:1 818000-221000	805000-270000 = 0.44:1 1210000	*2*
Times interest earned Pretax profit + interest Interest cost	550000 + 50000 = 12 times 50000	710000 + 80000 = 9.9 times 80000	*2*

WORKINGS:	**2017**	**2016**
Current assets:	310000+290000+120000 = 720000	160000+235000+270000+140000 = 805000
Current liabilities:	233000+65000+480000+40000 = 818000	50000+330000+30000+800000 = 1210000

Pre-tax profit: 2016 = 1920 – 650 – 80 – 130 – 350 = 710
2017 = 1980 – 820 – 50 – 150 – 410 = 550

Comment: **Marks**

The company has improved its stability in the past year, although it still seems poor, with current assets less than liabilities and quick assets even further short. The working capital ratio has gone up from 0.67:1 to just under 1:1, while the liquidity 1
ratio has improved from a potentially catastrophic 0.44:1 to a still far from ideal 0.72:1. 1
'Times interest earned', another indicator of the firm's stability, has also improved 1
significantly and would not, in itself, seem a cause for concern.

(Total marks = 9)

c) Insolvency and directors' responsibility:

A business is said to be insolvent when it is unable to pay its debts when they fall

due, or when its liabilities are greater than its assets. 1
The directors have a legal responsibility to ensure that the company remains solvent 1
and, if they become aware that it no longer is, to suspend its operations and take
whatever steps are needed to restore solvency or, if this is impossible, to wind up 1
the company up and liquidate its assets. If they permit the company to trade while 1
insolvent, they may be liable to criminal prosecution.

(Total marks = 4)

END OF SECTION 2

SECTION THREE - EXTENDED ANSWERS

Question 20 **(30 marks)**

a) The essential role of the chief accountant is to provide senior management and the board with the financial information they need to make good decisions about the company. This involves setting up and maintaining suitable systems for recording information and safeguarding financial assets, producing reports, including detailed cost reports, interpreting these reports, and suggesting strategies for future action to improve profitability and security. You will also be responsible for the preparation of reports required by the Corporations Act and the ASX, and for liaison with the company's external auditors.

[any 4 valid points x 1 mark] 4

b) The Corporations Act requires public companies to produce, within a set
period of the end of each year, audited financial statements in a specified 1
form. These statements must be sent to ASIC and also to the company's 1
shareholders and must be accompanied by a report from the external auditor 1
appointed by the shareholders. Audited half-yearly reports must also be sent
to ASIC, though they need not be sent to shareholders.
The reports must comply with Australian Accounting Standards. 1
As the company is listed on the ASX, it must also send them to the ASX, which will 1
then publish them on the market, financial reports in a specified form, which
may be more demanding than the requirements of the Act. For instance, the 1
ASX requires the immediate reporting of any information which is likely to
affect the price of the company's securities.

c) Corporate social responsibility is the idea that businesses have a responsibility 1
beyond that of maximising the returns on their owners' investment. It recognises
that the business has an impact on a wide range of groups for whom it ought, 1
therefore, to acknowledge some responsibility. This includes its own
employees, its suppliers, customers, the local community where it operates and, 1
at least for very big organisations, the public at large. This means that the company
needs to operate in a way that respects the rights of all these separate groups 1

Marks

– treating its employees and suppliers both legally and also ethically, having
regard to environmental and social factors, and avoiding actions likely to adversely 1
impact on them or on the community at large. This would include minimising
its environmental impact (see d) below), using resources sparingly and doing 1
what it can to assist people with whom it comes in contact to improve their lot.
As people become more aware of this concept, they will increasingly expect
companies to set goals in this area and to report on the extent to which they meet 1
these goals. This is what is known as Corporate Social Disclosure. Hence the
company may include with its financial statements information about its resource 1
usage, progress in minimising industrial accidents, involvement in the local

community and efforts it has made in providing career opportunities and training for its workforce. 1
CSD will provide you, as an accountant, some challenges, since it does involve areas in which you may not be an expert. Moreover, many aspects of 1
social & environmental performance are difficult to assess objectively, and lack 1
accepted benchmarks or standards. Furthermore, because such reporting is 1
mainly, at least for the moment, not compulsory, there are few guidelines or examples to be followed, and companies that do carry out CSD understandably 1
tend to concentrate in their reports on areas in which they can be shown to have done well.
d) Both mining/quarrying and manufacturing businesses can have a significant environmental impact, and this company is both! Extractive industries 1
inevitably disrupt the natural environment. Costs will be incurred in rehabilitating mined areas and organising the extractive process so that its impact 1
(e.g. on the water table) is minimised. Both extractive and manufacturing industries are likely to produce considerable physical and visual pollution – dust, effluent 1
discharge, noise of factory, traffic such as heavy trucks – and there will be costs in reducing this to a minimum, placing factories out of sight, surfacing 1
roads to eliminate dust, and so on.
e) 'Ethics' in any context essentially means doing the right thing, whether or not this is required by the relevant legislation. This means that the company and its 1
employees must try and act fairly at all times, even where, in the short term, this 1
might be to the company's economic disadvantage. As a senior manager 1
it is your responsibility to act ethically, not only because of the impact of your own actions, but because it will encourage other employees to act in the same way. Apart from the intrinsic benefits of acting ethically, to do so is likely to have a good effect on employee morale and the company's image and so, in the 1
long run, will probably be economically a good thing for the company.
(Total marks = 30)

Question 21 **(30 marks)**

a) To raise funds by issuing shares the company must prepare and publish a 1
prospectus in the form specified by the Act and have that prospectus approved 1
by the ASIC. This document will contain information about the company and its directors, its past and estimated future financial performance, and detailed 1
information about the purpose of the fund-raising. It will contain full details of the issue itself, how many shares and at what value, when applications must be received, 1
how oversubscriptions will be dealt with, and whether the issue is underwritten. It will also have an application form so that investors are able to submit 1
applications. A price will need to be decided for the share issue, although this is 1
less critical where there are no other shares on the market (subsequent issues of

Marks

shares will obviously need to be priced with regard to the market price of the existing shares if it they are to be successful).
Although it is not compulsory for public companies to have their securities listed on the stock exchange, in practice there are very few that are not, since the market for the shares in unlisted public companies is very limited and it would be difficult to persuade people to buy shares in them. Consequently the company 1
will need to apply to the Australian Securities Exchange (ASX) to have its shares listed on the exchange, a process known as 'floating the company' (very apposite in this particular case!). An application will need to be made containing a lot of 1
information required by the Listing Rules of the ASX and a fee will need to be paid.

The ASX imposes a good deal of on-going requirements for listed companies, mainly to ensure that there is what is called 'an informed market' for its securities, and an annual fee is payable. 1

b) The essential purposes of internal control are:

- *Protection of the firm's assets from loss or damage* 1
- *Ensuring the assets are used as efficiently as possible* 1
- *Providing management with sufficient information for them to achieve the first two purposes* 1

Assets over which internal control may be exerted would include cash holdings, debtors, inventories, and non-current assets. An outline of how these purposes might be achieved for each may be summarised as follows:

Cash *Minimising cash holdings: segregation of duties in relation to cash handling: proper approval of payments by two authorised persons: regular bank reconciliations: proper documentation of all receipts and payments: regular cash budgeting.*

Debtors *Careful vetting of credit customers to avoid those likely to default: meticulous record-keeping to ensure it is possible to identify problem debtors: regular reporting to bring problem debtors to the attention of management and ensure they do not increase their indebtedness: prompt follow-up action to recover sums owing by customers.*

Inventories *Physical security of stock through locked stores, CCTV and the like: careful documentation of ordering and checking of orders against receipts: stock recording systems that identify stock levels and record all movements into and out of stock and minimise the chances of fraud or theft (for this particular business, shop-lifting is unlikely to be a problem since the inventories will presumably consist of components for the products being made, but there may still be opportunities for misappropriation of such inventories).*

Non-current assets *Maintenance of complete, up-to-date, and readily accessible records of all assets: for machinery, regular and systematic servicing and maintenance: proper staff training in operation of plant and machinery: detailed operating procedures, especially for complex and/or dangerous machines: regular reporting to identify problems, under-utilisation of plant etc.*

*[any **two** categories of asset x up to 3 marks]* 6

c) Short-term cash surpluses, by definition, are only temporarily available.
They could be placed in short-term investments such as term deposits, government bonds, cash management trusts or on the short-term money market, 1 *or used to meet short-term liabilities if there is any financial benefit in doing so (e.g. if the company is being charged interest on amounts owing).* 1

d) Financial accounting is the term used to describe the gathering and reporting of financial information for the benefit of outside stakeholders e.g. shareholders, lenders, bankers, the ASIC, the investing public. 1 *It is in a prescribed form and reports*

Marks

are produced at regular but not very frequent intervals (usually six-monthly). For a public listed company like this it is an important obligation that they must fulfil. 1
Management accounting is for the benefit of the company's managers, to enable 1 *them to make planning & controlling judgments that will enable them to improve the company's financial performance. In the case of a manufacturing firm like this one, this will include detailed and frequent cost accounting and regular budgets to* 1 *measure performance against. This is obviously vital if the business is to be successful.*

e) Sources of funds for the company might include:

- *Bank overdraft: convenient source of short-term funding to cover temporary cash shortages. High interest rate but only charged on the amount outstanding so provides considerable flexibility. Usually secured against company's assets.*
- *Term loan from bank or other financial institution: lower interest rate than overdraft, repayments must be made but can often be spread over time, usually secured by a mortgage on property.*
- *Issue of debentures or other loan securities: possible slightly lower interest rate but, like all borrowings, interest must be paid, and repayment made, usually on a fixed date. Can be traded by the purchasers which may make them more attractive. May be secured (debentures) or not (unsecured notes).*
- *Leasing: possible for expensive fixed assets. Lease payments can be treated as an expense. The property does not belong to the lessee so cannot be sold nor used as surety. May include provision for the lessee to purchase at the end of the lease period.*
- *Hire purchase: similar to leasing except that normally the ownership of the property will pass automatically to the hirer at the end of the hire period.*
- *Supplier finance: suppliers may be prepared to delay the receipt of payment for their supplies. May or may not require interest to be paid. Really only suitable to meet short-term working capital needs.*

[any 3 sources x up to 2 marks] *6*

(Total marks = 30)

END OF PAPER