



Marking Key
Accounting and Finance
Year 12 – Semester 1 Exam
Modified BEWA and Edwest
examinations

2019

SECTION ONE: Multiple-choice

15% (15 marks)

1	C
2	C
3	A
4	B
5	B
6	C
7	D
8	A
9	B
10	A
11	D
12	C
13	A
14	A
15	D

1 mark each = 15

SECTION TWO: Short response

70% (132 marks)

Direct material	\$270	(1)
Direct labour	\$200	(1)
Variable expenses	\$200	(1)
Total variable costs	\$670	
Less reduction per unit	-\$20	(1)
Total variable cost for special order	\$650	

Instructions for teachers:

- Allow for follow through errors that is consequential errors should not be penalised
- Marks should not be subtracted for incorrect solutions
- Accept any other reasonable answers when marking theory questions

Question 16

(15 marks)

(a) Calculate if the business should accept the special order.

(13 marks)

Maximum capacity = 5,900 units (1)
 Current production = 5,000 units (1)
 Idle capacity = 900 units

Special order will result in an opportunity cost of 500 units (1,400 (1) - 900 (2)) = 500

Total variable costs

Contribution margin on special order

Sale price	1,400 x \$810	\$1,134,000	2
Less variable costs	1,400 x \$650	\$910,000	4
Contribution margin		\$224,000	
Less			
Special equipment		\$35,000	1
Opportunity cost	500 units x (\$930 - \$670)	\$130,000	5
Contribution margin on normal production	(3) (1) (1)		
Gain on special order		\$59,000	

Accept special order - Yes (1)

(b) Explain how fixed costs impact the decision to accept the special order.

(2 marks)

Fixed costs have no impact on the decision to accept or reject the special order (1) as the fixed costs remain the same whether the special order is accepted or not. (1)

Question 17

(29 marks)

(a) Calculate the standard cost of the product.

(7 marks)

Direct materials	3m (1) x \$7 (1)	21	2
Direct labour	0.5 hs (1) x \$12 (1)	6	2
Overheads	\$24,000 (1) / 3000hr (1) x 0.5 hr (1)	4	3
Total standard cost		\$31	

(b) Calculate the direct materials price variance

(5 marks)

Workings

(AP-SP) x AQP

Actual materials price = \$88,125 (1) / 17,750 (1) = \$4.96 per metre

← (\$4.96 - \$7.00) x 17,750 = \$36,210 favourable
 (2) (1) (1) (1)

Direct materials price variance: \$5,875 Unfavourable

(c) Calculate the direct material usage variance

(5 marks)

Workings

(AQI-SQA) x SP

17,750 - (3 x 6000) x \$7 = 17,750 - 18,000 x \$7 = -\$1750 favourable
 (1) (1) (1) (1) (1)

Direct materials usage variance: \$1,750 favourable

(d) Calculate the direct labour rate variance

(5 marks)

Workings $(AR - SR) \times ADLH$

$$AR = \$35,380 (1) / 2900 (1) = \$12.20$$

$$(\$12.20 - \$12) \times 2900 = \$580 \text{ unfavourable}$$

(2) (1) (1) (1)

Direct labour rate variance: \$580 unfavourable

(e) Calculate the direct labour efficiency variance

(5 marks)

Workings $(ADLH - SDLHA) \times SR$

$$SDLHA = (SDLH \times AO) = 0.5 (1) \times 6000 (1) = 3,000$$

$$(2,900 - 3,000) \times \$12 = -\$1200 \text{ favourable}$$

(1) (2) (1) (1)

Direct labour efficiency variance: \$1200 favourable

(f) Give two reasons to help explain the labour efficiency variance of Agatha and Christie

Manufacturing.

(2 marks)

Improved productivity by well trained and experienced staff (1)

New machinery or equipment which has reduced labour hours in the production process.

(1)

Question 18

(35 marks)

(a) Calculate the sales mix for the three products

(6 marks)

Workings:	
Total units =	$5,100 + 5,500 + 6000 = 16,600$ (3)
2 seater lounge	$5,100/16,600 = 31\%$ (1) + (3)
3 seater lounge	$5,500/16,600 = 33\%$ (1)
Cushions	$6,000/16,600 = 36\%$ (1)
Sales Mix 2 seater lounge:	31%
Sales mix 3 seater lounge:	33%
Sales mix rocker recliner:	36%

(b) Calculate the weighted average contribution margin.

(9 marks)

Workings:	
2 seater lounge:	$\$1150$ (1) - 650 (1) = $\$500$ x 31% (1) = $\$155.00$
3 seater lounge:	$\$1890$ (1) - 1260 (1) = $\$630$ x 33% (1) = $\$207.90$
Rocker recliner:	$\$650$ (1) - 350 (1) = $\$300$ x 36% (1) = <u>$\\$108.00$</u>
	$\$470.90$
Weighted average contribution margin: \$470.90	

(c) Calculate how many 2 seater lounges need to be sold to break even.

(4 marks)

Total fixed costs =	$\$1,050,000$ (1) + $\$800,000$ (1) = $\$1,850,000$
BE (total units) =	$\$1,850,000 / \470.90 (1) = $3,929$ units
BE(2 seater) =	$3,929 \times 31\%$ (1) = 1218
2 seater lounge Break-even point: 1218 units	

(d) Calculate the margin of safety as a percentage for 2 seater lounges.

(3 marks)

$$\text{MOS} = 5,100 (1) - 1,218 (1) = 3,882 / 5,100 (1) = 76.12\%$$

2 seater lounge Margin of safety: 76.12%

(e) Marple Manufacturers is limited to 71,000 machine hours to make their products. What combination of products should Marple Manufacturers produce in order to maximise profit?

(13 marks)

Contribution margin per unit per machine hour:

CM per unit /machine hours per unit

2 seater lounge: $\$500/4 = \125.00 (2)

3 seater lounge: $\$630/5 = \126.00 (2)

Rocker recliner: $\$300/4 = \75.00 (2)

Total machine hours available for the year = 71,000

3 seater lounge greatest contribution margin per machine hour therefore produce maximum followed by 2 seater lounge and rocker recliner.

Total machine hours available	Anticipated Sales x machine hours	Total machine hours	71,000	1
3 seater lounge	5,500 x 5	27,500	43,500	2
2 seater lounge	5,100 x 4	20,400	23,5100	2
Rocker recliner	23,100/4 = 5775 units Remaining machine hours		0	2

3 seater lounge: 5,500 units

3 seater lounge: 5,100 units

Rocker recliner: 5,775 units

Question 19

(33 marks)

(a) Calculate the net cash flows in the table below;

(11 marks)

Year	Cash Inflows	Cash Outflows	Net cash flow
0		\$300,000	-\$300,000 (1)
1	\$125,000	\$130,000	-\$5,000 (1)
2	\$150,000	\$130,000	\$20,000 (1)
3	\$248,000 + \$10,000	\$135,000 + \$15,000	\$108,000 (4)
4	\$248,000 + \$10,000	\$135,000	\$123,000 (2)
5	\$260,000 + \$10,000	\$135,000	\$135,000 (2)

(b) Calculate the payback period for the project.

(7 marks)

Year 0	\$300,000
Year 1	<u>+\$5,000</u> (1)
	305,000
Year 2	<u>-\$20,000</u> (1)
	285,000
Year 3	<u>-108,000</u> (1)
	177,000
Year 4	<u>-123,000</u> (1)
	54,000
Year 5	<u>-135,000</u>

** $(54,000/135,000) \times 12 = 4.80$ months rounded to 5 months (3)

Payback period: 4 years 5 months (total 7 marks)

Alternative calculation:

Year	Net Cash Flow	Cumulative	Marks
1	-5,000	-5,000	(1)
2	20,000	15,000	(1)
3	108,000	123,000	(1)
4	123,000	246,000	(1)
5	135,000	381,000	

$\$300,000 - \$246,000 = \$54,000$

$54,000/135,000 \times 12 = 4.80$ rounded up to 5 months (3)

Payback period 4 years 5 months.

(c) Calculate the Net Present Value of the project to nearest whole dollar.
(6 marks)

	Workings	Present Value
Year 1	-\$5,000 x 0.9434	-\$4,717 (1)
Year 2	\$20,000 x 0.8900	\$17,800 (1)
Year 3	\$108,000 x 0.8396	\$90,677 (1)
Year 4	\$123,000 x 0.7921	\$97,428 (1)
Year 5	\$135,000 x 0.7473	\$100,886 (1)
	PV of future cash flows	\$302,074 (5)

Present value of future cash flows – present value of cost of project

$$\begin{aligned} \text{NPV} &= \$302,074 (5) - \$300,000 (1) \\ &= \$2,074 \end{aligned}$$

(d) Based on your calculations, would you recommend the owners of Green Leaf Garden Supplies proceed with this project? Give two reasons to justify your answer?
(3 marks)

Yes. (1)

- NPV of future cash flows is positive. The project cash flows will exceed the desired return of 6%.
- The payback period is also within the owners' targeted period of 5 years.

1 mark for each (max 2 marks) acceptable answer to justify the yes or no response.

(e) Identify and discuss three other factors which should be considered by Green Leaf Garden supplies when considering whether or not to proceed with their project.
(6 marks)

- **Customer preferences:** (1) Will customers in the Ellenbrook area want to purchase the unique garden supplies which will possibly be more expensive than other competitors in the same area. (1)
- **Competitors:** (1) Who are the other major competitors in the Ellenbrook area supplying similar types of products? (1)
- What type of garden supplies do other competitors offer – are they similar? .
- **Government regulation:** (1) Is there any legal or environmental restriction on starting up the garden type of business in the Ellenbrook area? (1)

Question 20

(20 marks)

WORKINGS:

Sales	July	August	September
June (a/c rec)	23 000		
July (80/20)	112 000	28 000	
August (80/20)		128 000	32 000
Sept (80)			136 000
Accounts Payable	July	August	September
June 91 000 x .99	90 090		
July 95 000 x .99		94 050	
Aug 105 000 x .99			103 950

Insurance

Monthly expenses 1500 x 12 = 18000

Plant & equipment purchases payments:

150000/4 = 37500

Rent: 4000 x 2 = 8000

GHIBLI TRADERS

CASH BUDGET FOR JULY - SEPTEMBER 2019

	JULY	AUG	SEPT	Marks
Opening balance	18 400	17 310	29 760	1
RECEIPTS				
A/c receivable	23 000	28 000	32 000	3
Cash sales	112 000	128 000	136 000	3
Total cash available	153 400	201 310	229 760	
PAYMENTS				
A/c Payable	90 090	94 050	103 950	3
Insurance	18 000			2
Rent		8 000		2
Wages	21 000	24 000	24 000	1
Sundry	5 000	6 000	6 000	1
Drawings	2 000	2 000	2 000	1
Purchase of plant		37 500	37 500	2
Total payments	136 090	171 550	173 450	
Closing balance	17 310	29 760	56 310	1

(Total marks = 20)

SECTION THREE: Extended response

15% (30 marks)

Question 21

(30 marks)

(a) Outline the importance of business planning. How can goals, objectives and strategic business strategies help Gerry and Mary plan for a successful business?

(9 marks)

Business planning (3)

- It is an operating tool by which to manage the business and work towards success
- Communicates business ideas
- Allows for better use of scarce resources
- Sets benchmarks to judge performance
- Promotes accountability
- It improves the organisational focus

(max 3 marks for appropriate responses)

Setting goals (2)

- Establish a vision statement
- A view of where the business will be in short to medium term
- How will the business be operated into the future.
- What do Gerry and Mary want from their business?

(max 2 marks for appropriate responses)

Establishing objective (2)

- Setting targets for measuring success
- Objectives must be SMART – Specific, Measurables. Agreed, Realistic, Time Specific
- Key Performance Indicators can be the business' objectives.

(max 2 marks for appropriate responses)

Strategic business strategies (2)

- Cost leadership verses differentiation (i.e. competing with other competitors by keeping costs as low as possible and competing on price or competing on basis of offering a unique or premium product or service).
- Setting strategic targets that can be measured.
- Performance management – checking that KPI's have been achieved.

(max 2 marks for appropriate responses)

(b) Explain the difference between management and financial accounting.

(6 marks)

Management Accounting (3)

- Produce reports for internal use only.
- Reports used by managers, sales managers, production managers, financial controller
- Reports are future focussed
- No specific time period
- Reports produced when required

- Reports focussed on planning, coordinating and controlling
(1 mark each for any correct response-max 3 marks)

Financial Accounting (3)

- Produce reports for external users
- Reports used by shareholders, ATO, ASIC, employees, lobby groups, banks, investors.
- Reports are historical in nature – report what has happened.
- Reports are for a specified time period – usually the financial year.
- Subject to regulation
- Example of reports – Statement of position, Income statement, Cash Flow Statement, Statement of changes in equity.

(1 mark each for any correct response-max 3 marks)

- (c) Explain the importance of managing inventory and some procedures that Gerry and Mary could establish to ensure the appropriate management of inventory.

(6 marks)

Importance (3)

- Inventory levels can represent a large portion of the assets of a business
- Significant costs in storage of inventory
- Significant costs in managing and accounting for inventory
- Some inventory can become obsolete if not managed well
- Inventory can be stolen by customers or employees if not managed well
- Too much inventory may tie up money that could be better used elsewhere
- Too little inventory may mean a loss in sales

(1 mark each for any correct response-max 3 marks)

Inventory Procedures (3)

- Use perpetual inventory management system to help keep track of level of inventory on hand and inventory re-order points.
- Conduct stocktakes to confirm inventory on hand
- Check delivery of inventory against order forms and invoices
- Keep inventory in secure location with appropriate alarm systems in place.
- Segregation of duties to ensure different employees are ordering inventory, receiving inventory and paying for inventory.to help reduce errors, theft and fraud.

(1 mark each for any correct response-max 3 marks)

- (d) Gerry and Mary will need to set up credit arrangements for restaurant clients purchasing fresh meat and vegetables. Explain procedures for setting up and credit arrangements for their customers and managing accounts receivable.

(5 marks)

Setting up credit arrangements (2)

- Establish good credit checking procedures – customers to apply for credit, check bank and referees, set realistic credit limits and repayment terms.

(1 mark each for any correct response-max 2 marks)

Managing accounts receivable (3)

- Ensure invoices are sent out quickly and statements issued monthly.
- Follow-up outstanding amounts immediately.
- Be prudent in allowing extension of time for customers to pay amounts owing.
- Offer discounts to encourage early payment.
- Segregate duties to reduce risk of errors and fraud.

(1 mark each for any correct response-max 3 marks)

(e) Briefly explain the difference to Gerry and Mary between cost leadership and differentiation

(4 marks)

Cost Leadership: When a business establishes itself in the market according to cost. Being very price sensitive. Business will do everything to lead in the market by offering customers a product at a better price than competitors eg: Coles and Woolworths

Cost differentiation: When a business tries to position itself in the market by being recognised as offering more superior products to its customers based on quality or service. Not being price sensitive but rather charging a premium to customers for products. Rely on customer loyalty to the brand rather than price. Eg: David Jones or Myers

(2 marks for explanation for each – not necessary to include an example – max 4 marks)

OR

Question 22

(30 marks)

(a) Explain the difference between cash and accrual accounting. Provide an example of both an income item and an expense item to illustrate your answer. (6 marks)

Cash accounting-income and expenses are recorded only when cash is actually received or actually paid within an accounting period. (1)

Accrual accounting – income is recorded when earned and expenses are recorded when actually incurred. (1)

Examples-assume financial year ending 30 June		
	Cash accounting	Accrual Accounting
Rent \$300 received for 3 months in advance on 1 June	\$300 recorded as at 1 June (1)	\$100 – 1 month's rent recorded as at 1 June (1)
Wages of \$20,000 paid up to 25 June with \$1,500 owing as at 30 June but not payable until 1 July	\$20,000 recorded as an expense up to 30 June(1)	\$21,500 recorded as an expense up to 30 June(1)

(2 marks for suitable example of income and 2 mark for example of expense)

- (b) Discuss the purpose and function of performance reports. Provide two examples of common performance reports used in business. (6 marks)

Purpose (1)

- Businesses set goals and objectives and the purpose of a performance report is to measure the goals and objectives against actual results.

Function (3)

- To compare budgeted or planned performance against actual result to measure and investigate variances.
- Highlight favourable and unfavourable differences.
- To work out where changes need to be made in planning future budgets and goal setting.
- To assist in maintaining control over processes within the business and to improve performance into the future.
- Identify any flaws in budgeting process or need for future budget modifications
(1 mark each for any three appropriate examples)

Example reports (2)

- Cash budget performance report
- Sales budget performance report
- Budgeted income statement performance report.
- Ratio analysis of end of financial year financial reports such as Statement of Position and Income Statement
- Expenses budget
(1 mark each for any two appropriate examples)

- (c) What is a cash budget and how can a cash budget assist in management of the cash needs of a business? (5 marks)

A cash budget sets out the opening cash on hand and estimated future cash inflows and outflows and estimated cash balance at end of budget period. (1)
The cash budget can be calculated for any period of time as determined by management. (1)

Assist management (3)

- A cash budget is important as a planning tool for a business.
- A cash budget will identify surplus cash at the end of the budget period. Plans can be put in place to invest surplus funds in order to maximise returns on the surplus cash.
- A cash budget will identify cash shortfalls at the end of the budget period. Plans can be put in place to borrow cash to cover the shortfall or management may decide to change plans to avoid cash shortfall e.g. not proceed with purchase of a non-current asset until cash position improves.
- Enables a business to continually monitor cash position.

(1 mark each for any acceptable three responses)

- (d) What is cost-volume-profit analysis? List four ways a company can use cost-volume-profit analysis to assist in planning. (5 mark)

Cost volume profit analysis (CVP) is used to determine how changes in costs and volume can affect the profit of a business. (1)

Uses (4)

- A business can use CVP analysis to estimate future profits
- Decide on a selling price of products
- Calculate the best mix of products to sell to maximise profits.
- Make decisions about making or buying materials to use in the production process
- Calculate the break-even point in units and dollars
- Calculate is an area of production should be closed down
- Decide to accept a special order or not.

(1 mark each for any four acceptable responses)

(e) Explain the concept of insolvency

(2 marks)

A **person** is **solvent** if, and only if, the **person** is able to pay all the **person's** debts, as and when they become due and payable. (1)

A **person** who is not **solvent** is **insolvent**. (1)

(f) What is voluntary administration and what are benefits of voluntary administration?

(6 marks)

Voluntary administration is when an administrator is appointed (1) by either a creditor or majority of directors (1) to take control of the business and seek ways to solve a company's financial difficulties. (1)

Benefits (3)

- An outside, independent 'administrator' is appointed to take control of the company and investigate the possibility of working through liquidity problems to get the company back on track.
- Assesses actual financial position
- Gives time to consult with creditors
- Creditors can consider options as a group
- Is inexpensive to initiate
- Provides a legal mechanism to deal with creditors and negotiate payment of debts.

(1 mark each for any three acceptable responses)

End of questions