

TECHINICAL UNIVERSITY OF MOMBASA

BTIT: BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY

BAC 4150: INTRODUCTION TO ACCOUNTING

END OF SEMESTER EXAMINATION

SERIES: MAY 2016

TIME: 2 HOURS

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS.

QUESTION 1 (*compulsory*)

The following trial balance was extracted from the books of M. Doherty, a sole trader, on 31 December 2009:

	€	€	
Fixtures & fittings at cost		420,000	
Accumulated depreciation on fixtures & fittings			58,800
Motor vehicles		112,560	
Accumulated depreciation on motor vehicles			47,900
Inventories as at 1/1/2009		74,450	
Receivables and payables		98,030	101,200
Bank	17,800		
Prepayments 31/12/09		7,800	
Accruals 31/12/09		14,200	
Term loan	210,000		
Purchases and sales		546,500	879,000
Sales and purchases returns		21,400	11,650
Discounts allowed and received		18,400	19,640
Carriage outwards		21,000	
Insurance		33,700	

Rent		55,000	
Interest		15,520	
Wages and salaries		74,200	
Allowances for receivables 1/1/09			4,900
Irrecoverable debts		7,210	
Drawings 36,540			
Capital		177,220	
	1,542,310	1,542,310	

The following information, which has not been accounted for above, is also available:

1. Inventory as at 31 December 2009 was valued at cost at €83,500. This figure includes inventory items that cost €12,800. Post year end these inventory items were sold for €10,650 after incurring costs to sell of €970.
2. An item of fixtures & fittings was sold during the year for €16,980. The cost of the fixtures & fittings sold was €32,450 and depreciation of €19,460 had been charged as at 1/1/2009.
3. Depreciation is to be provided for as follows:
 - i. Fixtures & fittings - 4% straight line
 - ii. Motor vehicles - 15% reducing balance

The depreciation policy is to charge a full year's depreciation in the year of acquisition and none in the year of sale.
4. A review of receivables balances as at the year end identified €11,500 of receivables that should be written off as irrecoverable.
5. The allowance for receivables is to be adjusted for 7% of the remaining receivable balances.

You are required to prepare:

- i. The Statement of Profit & Loss for the year ended 31 December 2009;

12 Marks

- ii. The statement of financial position as at that date.

8 Marks

b)

A former colleague, B. Malone, recently started a business. While the first few months of trading have proved successful, B Malone now realises that she knows very little about financial accounting and has approached you for advice in relation to the accounting issues outlined below:

- a) An brief explanation of the function of the following books of prime entry and how the books of prime entry fit into the overall accounting process:

- i Sales day book;
- ii The cheque payments book;
- iii The journal.

5 Marks

- b) With the aid of appropriate examples, explain the difference between capital and revenue expenditure and how such expenditure is treated in the financial statements of a business.

5 Marks

30 MARKS

QUESTION 2

- a) Outline the situations where incomplete record techniques will be required to produce a set of financial statements.

3 Marks

- b) On 1 January 2009, P. Jones a sole trader owned a business, that had the following assets and liabilities:

	€
Motor vehicles	124,125
Accumulated depreciation on motor vehicles	21,030
Premises	450,000
Receivables	119,250
Allowances for receivables	2,100
Payables	96,000
Accruals	9,750
Inventory	33,400
Prepayments	780
Bank overdraft	11,415
Cash on hand	110
Term loan	210,000

You are required to:

i. Calculate the proprietor's capital as at 1 January 2009.

7 Marks

ii. In brief, outline your understanding of why the incomplete record technique used in part (i) will give the proprietors opening capital.

2 Marks

c) Despite being advised on the importance of maintaining proper books and records P. Jones failed to do so in the year to 31 December 2009. He is able to provide you with the following information:

	€
Opening receivables debit balance	119,250
Closing receivables debit balance	224,320
Closing receivables credit balance	1,560
Amounts received from customers	754,100
Discounts allowed to customers	12,450
Irrecoverable debts written off	2,970
Interest charged to receivables for slow payment	4,110

Based upon the information provided, you are required to calculate P. Jones's credit sales for the year to 31 December 2009. P. Jones is able to tell you that all goods are sold on credit.

8 Marks

Total 20 Marks

QUESTION 3

Part A

W. Willow is a sole trader. His business has decreased in recent years and as a result he rents out two floors in his building that are excess to his current requirements. Details for the year ended 31 December 2013 are as follows:

	31 December 2013	1 January 2013
	€/£	€/£
Rent paid in advance	?	8,000

Rent is paid to W. Willow bi monthly in advance. Rent for the year ended 30 September 2013 was charged at €/£4,000 per month, due to economic pressure rent was reduced to €/£3,200 per month from 1 October 2013 thereafter. €/£44,000 was received from the tenant during 2013.

You are required to prepare the rent T account for W. Willow for the year ended 31 December 2013.

5 Marks

Part B

Outline your understanding of the concepts of mark-up and margin.

3 Marks

A. Ash is a sole trader who sells one product. The selling price of the product is €/\$15. A. Ash currently enjoys a margin of 15% on the product.

Calculate the cost price of the product at the current margin of 15%.

2 Marks

Part C

Outline your understanding of the imprest system as it relates to petty cash.

2 Marks

Given the following information, calculate the cash replenishment required for the month of December 2013.

	€/£	
Imprest cash float	475	
Sundry postage	40	
Taxi receipts	41	
Stationary	53	
Retirement gift	100	
Depreciation on motor vehicles posted to the journal		1,120
Sundry cleaning costs	110	
		3 Marks

Part D

The following information is available for L. Lawn a Not-for Profit tennis club.

	31 December 2013		1 January 2013	
	€/£	€/£		
Subscriptions in arrears		10,580		12,540
Subscriptions in advance			6,305	7,100

During the year subscriptions of €/\$95,620 were received from members.

You are required to prepare the subscriptions T account for L. Lawn for the year ended 31 December 2013.

5 Marks

Total 20 Marks

QUESTION 4

a) When an individual decides to start a business, that business can be organised in one of three ways. Provide a definition of each of these business types.

6 Marks

b) Outline your understanding of the term limited liability.

2 Marks

c) Each business type, referred to in part a, has associated advantages and disadvantages. For each of these business types provide two advantage and two disadvantages.

12 Marks

Total 20 Marks

QUESTION 5

a)

B. Birch is a sole trader with the following information in relation his loan account:

	€
Loan balance 1/1/13	54,500
Loan draw down on 1/5/13	12,000
Loan repayment 1/10/13	8,000

Interest on the loan was constant throughout the year at 5%. During the year to 31 December 2013 loan interest of €2,500 was paid. There was no opening prepayment or accrual in relation to loan interest.

You are required to:

Prepare the interest account of B. Birch as it would appear in the nominal ledger for the year ended 31 December 2013. Show clearly your workings on the calculation of the interest charge for the year to 31 December 2013.

5 Marks

b)

Outline your understanding of the accruals concept. With the aid of a relevant example outline how the accruals concept impacts upon the preparation of a set of financial statements.

5 Marks

c) An explanation of carriage inwards and why it is added to purchases in the Statement of Profit & Loss.

3 Marks

d) B. Malone has provided you with the following information in relation to VAT for the period since she began trading. She is unclear how much her VAT liability is at present. You decide to prepare the VAT account in order to calculate the VAT liability.

- i VAT on sales €48,750;
- ii VAT on sales returns €1,200;
- iii VAT on purchases €26,700;
- iv VAT on purchases returns €120.

7 Marks

Total 20Marks

Solution One

M. Doherty

Statement of Profit & Loss for the year ended 31 December 2009

€ €

Sales		879,000
Sales returns		(21,400)
Net sales		857,600
Cost of sales		
Opening inventory		74,450
Purchases	546,500	
Purchases returns		(11,650)
		609,300
Less closing inventory		(80,380)
Cost of sales		(528,920)
Gross Profit		328,680
Discount received		19,640
Less Expenses		
Carriage outwards		21,000
Rent	55,000	
Insurance	33,700	
Interest		15,520
Wages and salaries		74,200
Discount allowed		18,400
Depreciation of fixtures & fittings		15,502
Depreciation of motor vehicles		9,699
Irrecoverable debts		18,710
Increase in the allowances for receivables		1,157
Profit on sale of FA		(3,990)
Total expenses		(258,898)
Net Profit		89,422

M. Doherty
Statement of Financial Position as at 31 December 2009

	2009	2009	2009
€	€	€	
Non-current assets			
Fixtures and fittings	387,550	(54,842)	332,708
Motor Vehicles	112,560	(57,599)	54,961
		387,669	
Current assets			
Closing inventory		80,380	
Receivables		80,473	
Prepayments		7,800	
		168,653	
Total Assets		556,322	
Equity and Liabilities			
Capital			
Capital		177,220	
Profit for 2009		89,422	
Accumulated profits		266,642	
Drawings	(36,540)	230,102	
Non-current liabilities			
Term Loan		210,000	
Current liabilities			
Payables		101,200	
Bank overdraft		820	
Accruals	14,200		
	116,220		
Total Equity and Liabilities			556,322

Solution Two

Part A

Incomplete records techniques will be required to produce a set of financial statements when a sole trader, for whatever reason, has not maintained proper books and records. Also in some cases a sole trader will maintain proper books and records but these have been destroyed due to a fire, flood or computer virus etc. In such situations some figures are likely to be missing and incomplete record techniques will be required to arrive at the missing figures.

Part B

i.

	2009	2009
	€	€
Assets		
Motor Vehicles	124,125	
Accumulated depreciation motor vehicles	(21,030)	
Premises	450,000	
Receivables	119,250	
Allowances for receivables	(2,100)	
Inventories	33,400	
Prepayments	780	
Cash on hand	110	
	704,535	
Liabilities		
Payables	96,000	
Accruals	9,750	
Bank overdraft	11,415	
Term loan	210,000	
	327,165	
Proprietors capital		377,370

ii.

The incomplete records technique used above relies upon the statement of financial position balancing. The statement of financial position will always balance because the debit entries will always equal the credit entries. This is the case due to the dual aspect concept. The dual aspect concept states that every transaction should have a two sided effect, one debit, one credit and these must have the same value. The dual aspect concepts ensures that at any point in time the assets of an entity equal the owner's capital and outsider's liabilities. In the question above all the assets of the sole trader were known and all of the liabilities with the exception of the proprietor's capital were known. Therefore the difference between the total assets and the total liabilities must equal the proprietor's capital.

Part C

Receivables Control Account

Opening Balance	119,250	Cash	754,100
Interest charged	4,110	Discounts allowed	12,450
Credit sales	868,920	Irrecoverable debts	2,970
Closing balance	1,560	Closing balance	224,320
	993,840		993,840
Opening Balance	224,320	Closing balance	1,560

Solution Three

Part A

Part A

Rent Receivable Account

€/£	€/£			
2013 Income Statement	45,600	01/01/13	Balance b/d	8,000
31/12/2013 Balance c/d	6,400		Bank	44,000

Part B

Mark-up and margin are measures that businesses use to set and manage prices to maximise profitability. Mark-up is the amount added to the cost of a product or service to arrive at a price, thus the mark-up percentage is the margin divided by the cost price and expressed as a percentage. The gross margin is the difference between cost and the selling price, thus the gross margin percentage is the margin divided by the sales price and expressed as a percentage.

	€/£
Sales price with 15% margin	15
Margin at 15%	(2.25)
Cost of product	12.75

Part C

Under the imprest system a cash float is set for petty cash – say €/£475. As cash is paid out of petty cash it is replaced with receipts for the items purchased.

At all times remaining petty cash plus receipts in the petty cash tin will equal the cash float. At the end of the month funds from the bank account are transferred into petty cash to bring the balance of cash back up to the float. At this point the expenses associated with the receipts are posted to the ledgers of the business.

Cash replenishment required for the month of December 2013:

	€/£
Imprest cash float	475
Sundry postage	(40)
Taxi receipts	(41)
Stationary	(53)
Retirement gift	(100)
Sundry cleaning costs	(110)
Cash balance at month end	131
Cash replenishment required	344

Part D

Subscriptions Account			
€/£	€/£	€/£	€/£
01/01/13 Balance b/d (arrears)	12,540	01/01/13 Balance b/d (advance)	7,100
2013 Inc & Exp Account	94,455	2013 Bank	95,620
31/12/2013 Balance c/d	6,305	31/12/2013 Balance c/d	10,580
	113,300		113,300
01/01/14 Balance b/d (arrears)	10,580	01/01/14 Balance b/d (advance)	6,305

Part E

Loan Balance

$$\begin{array}{l} \text{€} \quad \text{€} \quad \text{€} \\ 54,500 * 5\% = 2,725 * 4/12 = 908 \end{array}$$

$66,500 * 5\% = 3,325 * 5/12 = 1,385$
 $58,500 * 5\% = 2,925 * 3/12 = 731$
 Statement of Profit & Loss Charge 3,024

	Interest Account	
€	€	
2013 Bank	2,500	31/12/13 I/S charge 3,024
31/12/13 Balance c/d	524	
	3,024	3,024
1/1/14 Balance b/d	524	

Part E

Income is recognised in the financial statements as it is earned, not when the cash is received. Expenditure is recognised as it is incurred, not when it is paid for. When income is incurred over time (e.g. rental/interest income) or expenditures are time-based (e.g. rent payments), the income and expenditure recognised in the Statement of Profit and Loss should relate to the time period, not to the receipts and payments of cash. The accruals concept gives rise to accruals and prepayment in the accounts of businesses.

A practical application of the accruals concept is outlined below where expenses are matched to the revenues that they helped to generate. For example in the calculating the gross profit figure.

Gross profit is equal to sales minus cost of sales. In calculating the cost of sales figure we are interested only in the cost of the inventory sold during the accounting year. This is calculated by adding the inventory the business had at the beginning of the accounting period (opening inventory) to the net purchases of inventory made during the year, minus the inventory the business did not sell during the accounting period (closing inventory). Closing inventory is not included in the calculation of gross profit as it is still unsold at the end of the accounting period, it did not contribute to the sales revenue generated during the accounting period in question.

Only the cost of inventory sold during the year is matched to the sales revenue generated during the year. Closing inventory is included as a current asset in the Statement of Financial Position.

Solution Four

Part A

A business can be organised as a sole trader, partnership or company.

A sole trader business is the simplest business type, it is a business that is owned and operated by one person. However a sole trader business may employ more than one person. In the eyes of the law the sole trader personally and the sole trader's business are one and the same and therefore a sole trader is fully personally responsible for any losses that the business might incur.

A partnership business is one that is owned and controlled by at least two people. Most partnerships have between two and twenty partners but there are examples of partnerships, for example partnerships of accountants that have up to 50 partners. The operations of a partnership business tend to be more formalised and most partnership businesses will operate under partnership agreements. These agreements set down how important areas within the business are to be run and managed. For example, the duties of each partner and the ratio in which they share profits. In the absence of such an agreement the provisions of the Partnership Act 1890 apply.

A limited company is a business that is owned by its shareholders, run by its directors and enjoys limited liability. Limited companies can either be private or public. A private limited company does

not sell shares to the public whereas a public limited company does. Due to the large membership of limited companies they tend to be large and in many cases have a multinational aspect.

Part B

Limited liability applies when a business and its owners are considered to be separate and distinct in the eyes of the law. This means that an investor in a business with limited liability can only lose the money that they have invested in the business and no more. Limited companies enjoy limited liability, in the main sole traders and partners in a partnership do not. Limited liability encourages investor to invest money in a business as it limits the down side potential to a certain level. This may be one of the reasons why limited companies tend to be larger than sole trader and partnership businesses.

Part C

For a sole trader business the advantage and disadvantages are as follows:

Advantages

- The sole trader has total control over the business and enjoys all of the profits;
- A sole trader business is cheap and easy to set up. There are very few forms to fill out and the sole trader generally will only need to open a bank account and inform the tax authorities.

Disadvantages

- A sole trader has unlimited liability and therefore will be personally responsible for any debts that the business generates;
- Sole traders can find it difficult to raise long term finance as banks tend not to want to lend them large sums and there are no other investors in the business who can invest capital;
- Sole traders tend to be small in size and therefore the business will usually not grow to a sufficient size where it will enjoy economies of scale.

For a partnership business the advantage and disadvantages are as follows:

Advantages

- Spreads the risk across more people than a sole trader business. Therefore if the business was to get into financial difficulty there are more people to spread the debt between;
- Additional partners can bring resources, customers and skills into the business, allowing partnership businesses to grow larger than sole trader businesses.

Disadvantages

- Profits have to be shared among the various partners;
- There can be disagreement over the direction of the business. Any partner within a partnership has less control over the running of the business than a sole trader.

For a limited company the advantage and disadvantages are as follows:

Advantages

- Limited companies due to their size tend to find it easier than sole traders and partnerships to raise finance and as a result tend to be large. Many enjoy economies of scale as a result of this;

The shareholders in a limited company enjoy limited liability. This means that they are not personally responsible for any debts that the company may generate. If a limited company runs into financial difficulty the shareholders may lose their original investment but no more.

Disadvantages

- Limited companies can be costly and complicated to set up as there is significantly more documentation to prepare than is the case for either a sole trader or partnership business;
- Certain financial information must be made available to all users of financial information. That is, it must be public information. This could potentially affect the competitiveness of the company as potential sensitive information has to be released to the public and is freely available to competitors.

(Other relevant advantages and disadvantages exist for each business type and marks will be awarded for all relevant answers).

Solution Five

Part A

- i. The sales day book records credit sales.
- ii. The cheque payments book is part of the cash book which records all transactions through the bank. The cheque payments book as the name suggests records payments made by cheque.
- iii. The journal records all transactions that are not recorded in any other book of prime entry. Examples included non regular transactions for example the month end depreciation and accruals journals.

The primary purpose of financial accounting is to record, summarise and classify information that arises from the transactions that a business enters into. However if the ledgers were updated each time a transaction occurred, the ledgers would quickly become cluttered and errors may be made. Therefore when a transaction occurs it is entered into the books of prime entry. Entry of a transaction into the books of prime entry does not record the double entry required for that transaction.

However the books of prime entry do form the source for double entries for the ledger accounts. From the ledgers the trial balance and finally the financial statements are prepared.

Part B

Revenue expenditure is expenditure that is incurred for the purpose of running the business. That is, this expenditure is on items which are short term in nature, (will last for less than one year). Such items of expenditure are recorded in the Statement of Profit & Loss and therefore impact on the profitability of a business.

Examples include: wages, purchases of inventory for resale and light and heat.

Capital expenditure is expenditure on items that tend not to be purchased for resale but are used within the business to help generate profits. Such expenditure tends to be long term in nature, that is, the item purchased tends to last for longer than one year. Such items are recorded on the statement of financial position. Examples of such expenditure are the acquisition of non current assets and the repayment of loans.

Part C

Carriage inwards is the term commonly given to the transportation costs associated with the purchase of goods. Such costs cover the cost to transport goods from the supplier's premises to the business's own premises.

In some situations the supplier will bear these costs and as such the cost is part of the purchase price charged to the business. In other situations the transport cost will not be included in the purchase

price but will be quoted separately. In order to ensure that cost of sales and hence gross profit are consistently calculated in both of the above scenarios carriage inwards when separately quoted is added to the cost of purchases in the cost of sales section in the Statement of Profit & Loss.

Part D

Vat Control Account			
	€	€	
VAT on purchases	26,700	VAT on sales	48,750
		VAT on purchases	
VAT on sales returns	1,200	returns	120
Balance c/d	20,970		
	48,870		48,870
Balance b/d	20,970		

B. Malone has a VAT liability of €20,970