HONG KONG ASSOCIATION FOR BUSINESS EDUCATION

HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2011/12

BUSINESS, ACCOUNTING AND FINANCIAL STUDIES MOCK EXAMINATION

PAPER 2A
ACCOUNTING MODULE
(SUGGESTED ANSWERS)

QUESTION 1

(a) Journal

	DR	CR
	$	$
Motor vehicle	130,000	
Accumulated depreciation - machine	70,000	
Profit and loss: Loss on disposal	10,000	
Machine		160,000
Bank (130,000 -80,000)		50,000

Workings

As as 31 December 2008	**$**
Cost	**160,000**
Less: Accumulated depreciation (160,000 * 25%)	**40,000**
Net book value	**120,000**

As as 31 December 2009	
Cost	**160,000**
Less: Accumulated depreciation (160,000 * 25%) + (120,000 * 25%)	**70,000**
Net book value	**90,000**

(b)

Depreciation represents the expenditure for the use of fixed assets to generate revenue which illustrates the application of matching/accrual principle". 1

Expenses are incurred for the purpose of generating revenue. Matching/Accrual principle - in measuring net profit for a year, revenue should be offset by all the expenses incurred in generating that revenue. 1

QUESTION 2

Cash book

	$		$
Mr Li-Credit transfer	25,000	Balance b/f	5,030
		Jessica Yeung-Drawing	5,000
		Walt Ltd-Dishonoured cheque	3,500
		Donation-Tung Wah Hospital	1,000
		Trade Subscription-Direct debit	3,200
		Balance c/f	7,270
	25,000		25,000

(b)

Jessica Yeung

Bank Reconciliation Statement as at 30 September 2011

		$
Balance as per updated cash book		7,270
Add:	Unpresented cheques	6,800
		14,070
Less:	Outstanding deposits	4,200
Balance as per bank statement		9,870

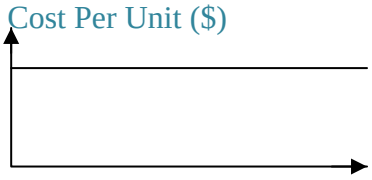
(c)

Timing errors mean that the differences will be eliminated as the time goes by.

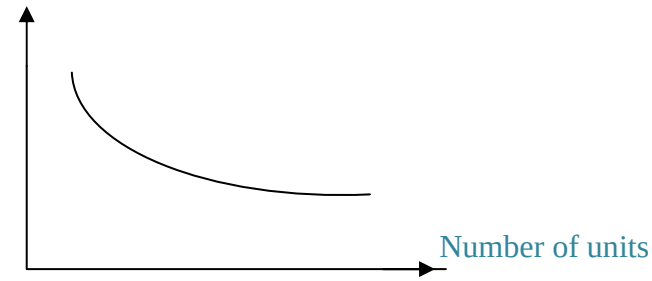
Permanent error cannot be eliminated unless the double entry adjustment made in the company books of accounts.

Question 3

(a) Variable costs are costs which tend to vary (in short term) with the level of activity (ie the total number of production units).



Fixed costs are related to time and are not affected by production or sales units within a fixed range of production units (ie the overall normal production capacity of the company being not exceeded).



(b) Costs of 150 batches:

	A	Z	Total ($)
Direct material	40x150x4.625 =$27,750	20x150x10.58 =$31,740	59,490
Direct labour	Mixing: 1,240x 60 Drying: 820 x 60		123,600
(i) Prime cost			183,090

(Note: Royalty is calculated based on sales and is payable to Head Office. It does not need to be considered at this stage of calculation.)		
(ii) Manufacturing overheads	Mixing: 1,240x 10 Drying: 820 x 25	32,900
Total cost of production		215,990

Total output of Super-G (after loss) = **150 x 40** x 0.9 =5,400kg
Unit cost of production: 215,990/ 5,400
= $40/kg

(iii) Super-G transferred to sales department at a margin of 36%
Margin = 0.36 of selling price
Costs =0.64 of selling price
40/ 0.64 = $63/ kg (Round to whole dollar)

Question 4

(a) Suppliers

Suppliers and other creditors are interested in information that enables them to determine whether amounts owing to them will be paid when due.

Trade creditors are likely to be interested in an enterprise over a shorter period than lenders unless they are dependent upon the continuation of the enterprise as a major customer.

Suppliers and trade creditors should pay attention to the limited liability as well as the sequences of the settlement upon the close of the business.
(Any **two** of above relevant information.)

(b) Lenders

Lenders are interested in information that enables them to determine whether their loans, and the interest attaching to them, will be paid when due.

Lenders are likely to be interested in an enterprise over a long period.

Lender should pay attention to the limited liability as well as the sequences of the settlement upon the close of the business.
(Any **two** of above relevant information.)

(c) Potential Investors

Investor is concerned with the risk inherent in, and return provided by the investment. The information help to determine whether they should buy, hold or sell.

Due to the restriction of limited liability, the investment may not be received upon the close of the business.
(Note: Other relevant information may be acceptable.)

Question 5

(a)

Revaluation

2011		$	2011		$
Apr 1	Fixtures	9,550	Apr 1	Premises	120,000
	Inventory	1,500		Bad debts allowance	1,750
" 1	Profit on revaluation —				
	Capital: Otto (2/5)	44,280			
	Capital: Keith (3/5)	66,420			
		121,750			121,750

(b)

Capital

2011			*Otto* $	*Keith* $	*Fugee* $	2011			*Otto* $	*Keith* $	*Fugee* $
Apr	1	Goodwill adj.	—	—	**70,045**	Apr	1	Balances b/f	200,000	250,000	—
	1	Motor		**19,652**		"	1	Goodwill adj.	**28,018**	**42,027**	—
"	1	Current a/c	**32,298**				1	Revaluation —	**44,280**	**66,420**	—
"						"	1	Bank	—	—	**220,045**
"							1	Current a/c		**21,205**	
"	1	Balances c/d	240,000	360,000	150,000	"					
			272,298	379,652	232,044				272,298	379,652	232,044

Current

2011			*Otto* $	*Keith* $	*Fugee* $	2011			*Otto* $	*Keith* $	*Fugee* $
Apr	1	Bal b/f	**46,000**	—	—	Apr	1	Balances b/f	—	96,475	—
"	1	Interest on Adv	**560**	**840**			1	Capital	**32,298**		
"	1	Capital		**21,205**		"	1	Bal c/d	14,262		
"	1	Balances c/d		74,430		"					
			46,560	96,475	—				46,560	96,475	—

Workings:

Goodwill ==(116550/6+122700/3+133186/2-18500-500475*10/100)*6=350,223

Goodwill Adjustment

Partner	Goodwill shared in old ratio		Goodwill shared in new ratio		Gain (loss)	Required adjustment		
		$		$	$			$
Otto	2/5	140089	8/25	112071	(28018)	*Cr*	Capital: Otto	28018
Keith	3/5	210134	12/25	168107	(42027)	*Cr*	Capital: Keith	42027
Fugee		—	5/25	70045	70045	*Dr*	Capital: Fugee	70045
		350223		350223				

(c) Any possible sources available to a partnership, e.g. bank loan, bank overdraft facilities...

(d)

Otto, Keith & Fugee

Statement of Financial Position as at 1 April 2011

	$	$
Non Current Assets		
Premises at net book value		500,000
Fixtures at net book value		85,950

Motor vehicles at net book value		66,598
		652,548
Current Assets		
Inventories		12,050
Account Receivables	15,500	
Less: Allowance for doubtful debts	775	14,725
Bank (5225+220045-71400)		153,870
Cash		1,975
		835,168
Capital accounts		
Otto	240,000	
Keith	360,000	
Fugee	150,000	750,000
Current accounts		
Otto	(14,262)	
Keith	74,430	
Fugee	--	60,168
		810,168
Current Liabilities		
Accounts payables	25,000	
		25,000
		835,168

Question 6

(a)

Let m = Total overheads for Maintenance department after the Personnel's overheads have been apportioned, and

p = Total overheads for Personnel department after the Maintenance's overheads have been apportioned.

m = $56,000 + p * 0.15 ----------(1)

p = $34,000 + m * 0.10 ----------(2)

Put equation (2) into equation (1):

m = \$56,000 + 0.15 (\$34,000 + 0.1m)

= \$56,000 + \$5,100 + 0.015m

0.985m = \$61,100

➔ m = \$61,100/0.985 = \$62,030 ----------(3)

Then, put equation (3) into equation (2):

p = \$34,000 + \$62,030 * 0.1

➔ p = \$40,203

	Production departments			Services departments	
	Cutting	Machining	Assembly	Maintenance	Personnel
Budgeted Overheads (\$)	154,482	64,316	58,452	56,000	34,000
Re-apportionment:					
Maintenance	12,406	27,914	15,507	- 62,030	6,203
Personnel	22,112	4,020	8,041	6,030	- 40,203
	\$189,000	\$96,250	\$82,000	nil	nil

(b) The pre-determined overhead absorption rates:

Cutting department (based on direct labour hours)

X	7,000 x 9	63,000
Y	3,000 x 7	21,000
		84,000

\$189,000/84,000 = \$2.25 per direct labour hour

Machining department (based on machine hours)

X	7,000 x 2	14,000
Y	3,000 x 4.5	13,500
		27,500

\$96,250/27,500 = \$3.50 per machine hour

Assembly department (based on direct labour hours)

X	7,000 x 3.5	24,500
Y	3,000 x 5.5	16,500
		41,000

\$82,000/41,000 = \$2 per direct labour hour

(c)

		Product X			**Product Y**	
			$			$
Direct materials			70.00			50.00
Direct labour costs:						
Cutting	(9 x $30)	270.00		(7 x $30)	210.00	
Machining	(1.5 x $40)	60.00		(2 x $40)	80.00	
Assembly	(3.5 x $50)	175.00	505.00	(5.5 x $50)	275.00	565.00
Prime cost			575.00			615.00
Overheads:						
Cutting	(9 x $2.25)	20.25		(7 x $2.25)	15.75	
Machining	(2 x $3.5)	7.00		(4.5 x $3.5)	15.75	
Assembly	(3.5 x $2)	7.00	34.25	(5.5 x $2)	11.00	42.50
Unit costs			609.25			657.50
Mark-up		(40%)	243.70		(20%)	131.50
Unit selling prices			852.95			789.00

Budgeted sales revenue for next year:
= $852.95 × 7,000 + $789.00 × 3,000
= $8,337,650

Alternative answer for Q6(c)

	Product X		**Product Y**	
	$	$	$	$
Direct materials		490,000		150,000
Direct labour costs:				
Cutting	1,890,000		630,000	
Machining	420,000		240,000	
Assembly	1,225,000	3,535,000	825,000	1,695,000
Prime cost		4,025,000		1,845,000
Overheads:				
Cutting	141,750		47,250	
Machining	49,000		47,250	
Assembly	49,000	239,750	33,000	127,500
Total costs		4,264,750		1,972,500
Mark-up	(40%)	1,705,900	(20%)	394,500

Sales revenue	5,970,650	2,367,000

Budgeted sales revenue for next year:

= $5,970,650 + $2,367,000

= $8,337,650

(d)

Departments	Actual labour hours	Actual machine hours	Actual Overheads ($)	Overheads absorbed ($)	Over/Under-absorption ($)
Cutting	86,000	0	=193,500-15,700 177,800	=86,000x$2.25 193,500	Over-absorbed by 15,700
Machining	15,500	28,600	122,300	=28,600x$3.5 100,100	=122,300-100,100 Under-absorbed by 22,200
Assembly	**41,000** *	10	**82,000 ****	=41,000x$2 **82,000**	0

* =7000x3.5+3000x5.5 **It is the same as the amount absorbed.

(e)

- As compared with marginal costing approach, it is easier to distinguish between manufacturing and non-manufacturing costs under absorption costing.
- Absorption costing is used by companies to ensure that all products/services bear an equitable share of company overheads.
- HKAS 2 requires that inventories should be valued at full production cost.
- Absorption costing is required to allocate overheads to products in order to meet external financial reporting requirements.

Question 7

(a) Narrations should NOT be required.

		Dr	Cr
		$	$
(ii)	Sales	24,000	
	Debtors		24,000
	Goods sent on approval wrongly treated as sales		
(iii)	Debtors	39,900	
	Sales		39,900
	Sales omitted		
	Suspense	68,000	
	Sales		68,000
	Sales understated		
	Debtors	35,910	
	Sales Returns		35,910
	Sales returns overstated		
(iv)	Bad debts	48,500	
	Debtors		48 500
	Bad debts made		
	Creditors	55,000	
	Discount allowed	5,450	
	Debtors		60,450
	Contra transfer and discount allowed		
(v)	Suspense	25,000	
	Discount allowed		25,000
	Discount allowed overcast		
	Bank	26,500	
	Suspense account		26,500
	Credit side of bank account overcast		
	Debtors	56,850	
	Bad debts recovered		56 850
	Bad debts recovered		
(vi)	Suspense	7,700	
	Interest		3,850
	Interest received		3,850
	Interest received realised as interest revenue		
	No entries needed		

Sales returns not entered		
Drawing	20,750	
Maintenance		20,750
Owner's private transaction wrongly entered		
Diminution in value	16,000	
Suspense account/ Investment		16,000
Double entry for diminution not duly completed		

(b) IT will help in avoiding submission error/single entry and would not help in avoiding misconduct of employee .

SECTION C

Question 8

(a) The elements of direct costing is a formal recognition of the ideas which are used by management for decision makings. The conventional absorption costing statements rarely classifies costs into fixed and variable categories, and thus managers, who are accustomed to looking at operations from a breakeven analysis for a short term decision making purpose, find that the traditional absorption costing and income statement fails to fit in with cost-volume-profit relationships. Managers are then forced to take time for an attempt to reconcile and interpret two sets of figures which generate fundamentally from a single operation.

Different cost analysis and different income concepts are required for different purposes. The analysis statement based on the direct costing method focuses attention on the appropriate data for appraisals of performance. Since there is a constant relationship between variable costs and sales, the contribution margin approach is useful in making special decisions, such as pricing, dropping or adding products, advertising and selection of distribution channels. Variable costs are subject to better short-run control and management. Any

decision which has an impact on profits may be rapidly appraised when the direct costing approach is in use, because fluctuations in overhead absorption are not present to complicate analysis. The direct costing technique does not maintain that fixed costs are unimportant or irrelevant; but the distinction between behaviours of different costs is crucial for certain decisions.

(b) Two disadvantages of using cost-volume-profit analysis:

---It is difficult to segregate the fixed costs from variable costs, which could lead to inaccurate calculation of contribution per unit and faulty decisions due to inaccurate determination of breakeven point.

---The selling price would be variable due to external market condition changed.

---For those multiple products sales, different products are assumed to follow with the standard sales mix. In reality, the factors may be variable.

(c) The current budget activity level:

Original Budget	Punch Super ($/ litre)		Punch + ($/ litre)		Total ($/ litre)
Selling Prices		190		90	
Variable Costs					
Materials	(58)		(21)		
D Labour 1.5 x 45 0.8 x 45	 (67.5)		 (36)		
Variable overheads 12 x 1.5 8 x 0.8	 (18)		 (6.4)		
Commission	(6)	(149.5)	(4.5)	(67.9)	

Contribution per litre by sales mix(0.5:0.5)		40.5 20.25		22.1 11.05	 31.3
Total Fixed overheads					
Promotion Overhead $99,080 x 12					$1,188,960
Manufacturing Overheads (15+9)58,800					$1,411,200
					$2,600,160
Breakeven Point	***2,600,160/31.3= 83,072.2litres*** ***Punch Super=41,537litres; or$7,892,030*** ***Punch+=41,537litres; or$3,738,330***				
<u>Proposal 1</u>	Punch Super ($/ litre)		Punch + ($/ litre)		Total ($/ litre)
Selling Prices		190		90	
Variable Costs					
Materials	(58)		(21)		
D Labour 1.2x 45 0.64 x 45	(54)		 (28.8)		
Variable overheads 12 x 1.5 x **0.8** 8 x 0.8 x **0.8**	(14.4)		 (5.12)		
Commission	(6)	(132.4)	(4.5)	(59.42)	
Contribution by litre by sales mix(0.5 :0.5)		57.6 28.8		30.58 15.29	 44.09
Total Fixed overheads					
Promotion					$1,188,960

Overhead					
Leasing Costs (6,762x12)					$81,144
Manufacturing Overheads					$1,411,200
Total overheads					$2,681,304
Breakeven Point					***BEP : 2,681,304 /44.09*** ***Punch Super=30,408 litres*** ***Punch+=30,408 litres***
Net profit	***79380 x (57.6+30.58) – 2,681,304 =$4,318,424.4***				
Proposal 2	Punch Super ($/ litre)		Punch + ($/ litre)		Total ($/ litre)
Selling Prices		190		90	
Less: Buy-in costs Variable selling overhead	(175) (3)	(178)	(79) (3)	(82)	
Unit surplus		12		8	
Extra Increased sales (58, 800 pack x 35%)		20,580		20,580	
Increased contribution (1)		$246,960		$164,640	$411,600
Original Contribution from sales of 58,800. 58,800x40.5 58,800x22.1 (2)		$2,381,400		$1,299,480	$3,680,880
The original total overhead					

(3)					$2,600,160
Net profit (1+2-3)					$1,492,320
No breakeven point can be determined in proposal two because the marginal variable costs do not remain constant. However, the over profit can be determined using marginal costing method.					

The proposal one will be accepted when the total sales are increased by 35% . It is because the net profit in proposal 0ne ($4,318,424.4) is higher than proposal two ($1,429,320).

(d) Any two non-financial factors to be considered:

--How reliable would the assumptions (eg the market demand of products) and estimated figures (eg inflation rate) be ? These would affect the final profitability of the Company.

--What would be the likely reactions counter-acted by the competitors ? These would lead to the increase in competition both in material procurement and market sharing.

--Would there be any risk management concerning the standard mix of products presumed ? The mix would be affected by the change in customers' taste or expectation.

--How would the service of equipment maintenance be assigned ? Would the general manufacturing overheads be forecasted accurately ?

(e) The minimum selling price for the product of 'Green Punch'

	$
Direct Material --A43 irrelevant due to no replacement --Z, a regular stock at replacement cost	 0 51,145
Labour cost =45 x 1.25 x 60	 3,375
Variable overhead: -60 x 6	 360
Commission -3 x 300	 900
Total costs	55,780
Minimum cost per litre	$185.93/litre

(Note; Fixed production overhead ignored ---not a relevant cost.)

(f) The advantage for New Line Holding Ltd using marginal costing method:

--to treat fixed cost as periodic cost because only two processes are found in the company. The overhead costs are simple to be control while the concentration can be focused on the variable costs. The increase of sales can rely on the additional leasing of production line which can relieve some burden of fixed costs (eg maintenance cost) to the company.

--to avoid the arbitrary apportionment of production overheads and the determination of appropriate overhead absorption rates because of simple production processes. Therefore, the use of marginal costing operating statement can assist quicker decision making.

(Note: Other relevant advantage may be acceptable.)

Question 9

(a) Errors and unusual items found:

i. Wrong sales figure – According to the concept of realization, revenue is recognized when it is earned and not upon cash receipt. The receipts from selling Moon cake coupons of $720,000 should not be treated as sales and be treated as liability until it is redeemed.

ii Wrong treatment of advertising expense – According to the concept of prudence, we anticipate no profits but provide for all losses. Advertising expense relates no certain revenue and should be written off when it is incurred. It should not be treated as deferred asset.

iii Wrong treatment of accrual – According to the concept of accrual, expense is recognized when it is incurred and not uponcash payment. The correct expenses for electricity and rent for the year should be $68,900 and $250,000 respectively.

iv Research expense wrongly capitalized – Only development cost fulfilling the criteria for recognition should be capitalized and amortized. General research expense should be written off when it is incurred.

v Exceptionally hefty sundry expenses – According to the concept of materiality, only significant items will be disclosed separately. However, the sundry expenses amounted almost equal to the rental expense and the major items included should be disclosed.

vi Unusual treatment of noncurrent assets – According to the concept of matching, expense is matched with the revenue it derived. Thus, value noncurrent assets should be written off in accordance with its pace of contribution. Rate of deterioration and life of fixture and machine will likely vary and thus different deprecation will normally be adopted.

vii. Unusual defer payment of rental – the outstanding rental payment equals to roughly 8 months' rental and it will adversely affect the credibility of the business owner.

viii No bank account – it is highly unusual that there is no bank account and having a large cash balance on hand.

(b) Possible ways to finance the new project

i. Proposal A –The business has already made only a small profit of $35,265 and the debt ratio is already too high (59%). This option is thus not desirable.

ii. Proposal B – The capital cost of bank overdraft is currently cheaper than the bank loan. However, bank overdraft is repayable on demand so it could be dangerous to use an overdraft to finance a long term project. iii. Proposal C – The key feature of limited company is limited liabilities. It helps attract investors probably from friends and relatives of the family. Private limited company is not allowed to raise fund from the public. Though, as the sum is not large, it is a least costly option to support the project. :	

Workings: adjusted final accounts

Statement of Comprehensive Income for the year ended 31 December 2010

		$	$
Sales			1,905,900
Less Cost of Sales			680,000
Gross Profit			1,225,900
Less:	Operating expenses		
	Advertising expenses	120,000	
	Research expenses	88510	
	Electricity	68,900	
	Wages	281,900	
	Rent	250,000	
	Sundry expenses	187,750	
	Depreciation	193,575	1,190,635
Net profit			35,265

Statement of Financial Position as at 31 December 2010

	$	$
Noncurrent assets		1,096,925
Current assets		
Cash		390,440
		1,487,365
Capital		1,213,300
Add: Net Profit		35,265
		1,248,565

Less: Drawing	640,000
	608,565
Current liabilities	
Moon cake coupons not redeemed	720,000
Accruals	158,800
	1,487,365

END OF PAPER