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BERJAYA BUSINESS SCHOOL

FINAL EXAMINATION

Student ID (in Figures) :	
Student ID (in Words) :	

Course Code & Name : **ACC3213 MANAGERIAL ACCOUNTING**
Trimester & Year : MAY – AUGUST 2018
Lecturer/Examiner : JAMES LIOW
Duration : 3 Hours

INSTRUCTIONS TO CANDIDATES

1. **This question paper consists of 2 parts:**
   PART A (50 marks) : Answer ONE (1) compulsory question. Answers are to be written in the Answer Booklet provided.
   PART B (50 marks) : Answer TWO (2) out of THREE (3) problem solving questions. Answers are to be written in the Answer Booklet provided.
2. **Candidates are not allowed to bring any unauthorized materials except writing equipment into the Examination Hall. Electronic dictionaries are strictly prohibited.**
3. **This question paper must be submitted along with all used and/or unused rough papers and/or graph paper (if any). Candidates are NOT allowed to take any examination materials out of the examination hall.**
4. **Only ballpoint pens are allowed to be used in answering the questions, with the exception of multiple choice questions, where 2B pencils are to be used.**

WARNING: The University Examination Board (UEB) of BERJAYA University College regards cheating as a most serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed, and in accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from BERJAYA University College.

Total Number of pages = 7 (Including the cover page)

PART A : **COMPULSORY QUESTION (50 MARKS)**

INSTRUCTION(S) : There is **ONE** (1) question in this section. Write your answers in the Answer Booklet(s) provided.

Securi Sdn Bhd has prepared the following four month sales budget, in units, for its two products Tee and Pee.

	April	**May**	**June**	**July**
Product Tee	500	600	650	550
Product Pee	400	200	250	350

The direct material costs per unit of product are as follows:

	Product Tee	**Product Pee**
Material A	4kg @ $4 per kg	12kg @ $4 per kg
Material B	8kg @ $5 per kg	16kg @ $5 per kg

Production during each month is budgeted at a level to ensure that finished goods at the end of each month are equal to 10% of the next month's budgeted sales.

Raw materials are purchased on a regular basis, as required for production during each month and to ensure that closing stocks are equal to 25% of the next month's production requirements.

REQUIRED

a) Prepare the following budgets:

(i) The production budget (in units) for each of the products Tee and Pee for the month of April and May. (8 marks)

(ii) The purchases budget (in kg's and $'s) for each of the materials A and B for the month of May. (12 marks)

b) List **FIVE (5)** benefits that are expected to accrue from the use of budgets. (5 marks)

(c) Another subsidiary of the company, Tagari Sdn Bhd, manufactures three alarm devices. The budgeted unit cost and resource requirements of each of these items are tabled below:

	S **($)**	**H** **($)**	**V** **($)**
Direct material	4.00	15.00	10.00
Direct labour cost	4.00	10.00	8.00
Variable overhead cost	4.00	7.50	6.00
Fixed overhead cost	4.50	11.25	9.00
	16.50	**43.75**	**33.00**

	S	**H**	**Y**
Budgeted volume (units) per month	4,000	2,000	1,500
Selling price ($)	20.00	50.00	40.00

The budgeted volumes are believed to equal the market demand.

Assume the following:
- Fixed overhead costs are attributable to the three products on the basis of direct labour hours.
- Labour rate is $4.00 per hour.
- Cost of direct material is $2.00 per unit.

In the following month, a shortage of direct material is expected and a limit of 20,000 units is available.

Required

(i) Determine the optimum production plan and state the net profit or loss that this company should yield for that month.

(15 marks)

(ii) A supplier has proposed to supply the three finished products at the following prices:

S	**H**	**V**
$	**$**	**$**
13.00	36.00	28.00

Determine the optimum purchase option and the quantities to be produced for each product.

(6 marks)

(iii) Evaluate other factors that should be considered in (c) (ii) above.

(4 marks)

[Total 50 marks]

END OF PART A

PART B : **PROBLEM SOLVING QUESTIONS (50 MARKS)**

INSTRUCTION (S) : There are **THREE** (3) questions in this section, answer only **TWO** (2) questions. Write your answers in the Answer Booklet(s) provided.

QUESTION 1

The following budgeted profit and loss account has been prepared for Q Bhd for the four months, July to October 2014.

	July $'000	**August $'000**	**September $'000**	**October $'000**
Sales	60	50	70	60
Production costs	50	55	32.5	50
Stock adjustment	(5)	(17.5)	20	(5)
Cost of sales	45	37.5	52.5	45
Gross Profit	15	12.5	17.5	15
Admin/selling overhead	8	7.5	8.5	8
Net Profit before interest	7	5	9	7

The working papers provide the following information:

1. 40% of the production cost relates to direct materials. Materials are bought in the month prior to the month in which they are used, and 50% of them are paid for in the month of purchase. The remainder is paid for one month later.

2. 30% of the production cost relates to direct labour which is paid for when it is used.

3. The remainder of the production cost is production overhead. $5,000 per month is a fixed cost which includes $3,000 depreciation. Fixed production overhead costs are paid monthly in arrears. The variable production overhead is paid 40% in the month of usage and the balance one month later.

4. The administration and selling costs for the 3rd quarter are to be paid in advance on 1 July. The amount payable is $15,000.

5. Creditors on 1 July 2014 are expected to be:
   Direct materials $10,000
   Production overheads $11,000

6. The amounts expected to be received from customers during July to September are:
   July $69,600
   August $56,944
   September $56,470

7. The company intends to purchase capital equipment costing $30,000 in August which will be payable in September.

8. The bank balance on 1 July 2014 is expected to be $5,000 overdrawn. The bank balance on 1 June 2014 is expected to be $5,000 (positive).

9. Interest is payable/receivable on average monthly bank balances (opening + closing) ÷ 2, at the following rates:
   - Positive balances – interest receivable 1% per month
   - Overdrawn balances – interest payable 2% per month
   - Interest is payable/receivable in the following month.

Required

Prepare a cash budget for each of the following months July to September 2014 for Q Bhd, showing clearly the bank balance at the beginning and end of each month.

[Total 25 marks]

QUESTION 2

The following profit reconciliation statement summarises the performance of one of SEW Sdn Bhd's products for the month of July:

			$
Budgeted Profit			4,250
Sales volume variance			850 A
Standard profit on actual sales			3,400
Selling Price variance			4,000 A
			(600)
Cost variances	**Adverse**	**Favourable**	
	$	**$**	
Direct material price		1,000	
Direct material usage	150		
Direct labour rate	200		
Direct labour efficiency	150		
Variable overhead expenditure	600		
Variable overhead efficiency	75		
Fixed overhead expenditure		2,500	
Fixed overhead volume		150	
	1,175	3,650	2,475 F
Actual Profit			**1,875**

The budget for the same period contained the following data:

Production/Sales Volume		1,500 units
Sales revenue	$20,000	
Direct material purchased and used		750 kgs
Direct material cost	$4,500	
Direct labour hours		1,125
Direct labour cost	$4,500	
Variable overhead cost	$2,250	
Fixed overhead cost	$4,500	

Additional information:

1. Stocks of raw materials and finished goods are valued at standard cost.
2. During the month the actual number of units produced was 1,550.
3. The actual sales revenue was $12,000; and
4. The direct materials purchased were 1,000 kgs.

Required

(a) Calculate the following:

(i)	Actual sales volume	(2 marks)
(ii)	Actual quantity of materials used	(3 marks)
(iii)	Actual direct material cost	(2 marks)
(iv)	Actual direct labour hours	(3 marks)
(v)	Actual direct labour cost	(3 marks)
(vi)	Actual variable overhead cost	(3 marks)
(vii)	Actual fixed overhead cost	(3 marks)

(b) Explain the possible causes of the direct materials usage, direct labour rate and sales volume variances. (6 marks)

[Total 25 marks]

QUESTION 3

Carnival Corporation Ltd owns cruise lines, is one of the largest vacation companies in the world. The company has decided to make significant capital investment in cruise ships in order to increase their revenues. The company is planning to purchase three extremely large cruise ships for a total consideration of $2,500,000 versus five smaller cruise ships for a total consideration of $1,400,000.

Information on these two alternatives is provided below:

	Three Larger Ships	**Five Smaller Ships**
Initial investment	$2,500,000	$1,400,000
Estimated useful life	20 years	20 years
Annual cash inflows	$550,000	$430,000
Annual cash outflows	$222,250	$206,350
Annual revenues (accrual)	$500,000	$380,000
Annual expenses (accrual including depreciation)	$200,000	$180,000
Estimated salvage value	$500,000	$0
discount rate	9%	9%

Present value of $1.00 at 9%

Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
0.91743	0.84168	0.77218	0.70843	0.64993	0.59627	0.54703	0.50187	0.46043	0.42241
Year 11	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
0.38753	0.35553	0.32618	0.29925	0.27454	0.25187	0.23107	0.21199	0.19449	0.17843

Accumulative present value of $1.00 at 9%

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
0.91743	1.75911	2.53129	3.23972	3.88965	4.48592	5.03295	5.53482	5.99525	6.41766
Year 11	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
6.80519	7.16072	7.4869	7.78615	8.06069	8.31256	8.54363	8.75562	8.95011	9.12855

Required

Calculate the following capital investment techniques and recommend which investment alternatives would you recommend based on each technique:

a) Payback period
b) Net present value
c) Profitability index
d) Annual rate of return

[Total 25 marks]

END OF QUESTION PAPER