

BERJAYA BUSINESS SCHOOL**FINAL EXAMINATION**

Student ID (in Figures) :

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Student ID (in Words) :

Subject Code & Name : **MBA5405 MANAGEMENT CONTROL & COSTING SYSTEMS**
Semester & Year : JANUARY – APRIL 2016
Lecturer/Examiner : JAMES LIOW
Duration : 3 Hours

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 2 parts:
PART A (70 marks) : Answer ONE (1) mini case study. Answers are to be written in the Answer Booklet provided.
PART B (30 marks) : Answer THREE (3) out of FIVE (5) short answer questions. Answers are to be written in the Answer Booklet provided.
2. Candidates are not allowed to bring any unauthorized materials except writing equipment and calculator 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 of Hospitality 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 of Hospitality.

PART A : CASE STUDY (70 MARKS)

INSTRUCTION (S) : Part A consists of ONE (1) mini case study. You are required to answer ALL questions in the Answer Booklet provided. All workings are to be shown in the Answer Booklet.

The Fishburn plant of Hibeem Electronics Corporation makes two types of wafers, R101 and R202, for electronic instruments. The old cost accounting system at the plant traced support cost to four cost pools:

Cost Pool	Support Costs (\$)	Cost Driver
S1	1,176,000	Direct labour cost
S2	1,120,000	Machine hours
P1	480,000	-
P2	<u>780,000</u>	-
	<u>3,556,000</u>	

Pool S1 included service activity costs related to setups, production scheduling, plant administration, janitorial services, material handling and shipping. Pool S2 included activity costs related to machine maintenance and repair, rent insurance, power and utilities. Pools P1 and P2 included supervisor' wages, idle time and indirect materials for the two production departments, photolithography and assembly respectively.

The old accounting system allocated support costs in Pool S1 and S2 to the two production departments using direct labour cost and machine hours respectively as the cost drivers. Then accumulated support costs in pools P1 and P2 were applied to the products on the basis of direct labour hours. A separate rate was determined for each of the two production departments. The direct labour wage rate is \$15 per hour in photolithography and \$18 per hour in assembly.

Department	DIRECT LABOUR HOURS (DLH)			Direct Labour Costs (\$)
	R101	R202	Total	
Photolithography (P1)	60,000	20,000	80,000	1,200,000
Assembly (P2)	<u>72,000</u>	<u>48,000</u>	<u>120,000</u>	<u>2,160,000</u>
Total	<u>132,000</u>	<u>68,000</u>	<u>200,000</u>	<u>3,360,000</u>

Department	MACHINE HOURS (MH)		
	R101	R202	Total
Photolithography (P1)	30,000	10,000	40,000
Assembly (P2)	<u>72,000</u>	<u>48,000</u>	<u>120,000</u>
Total	<u>102,000</u>	<u>58,000</u>	<u>160,000</u>

Item	R101	R202
Sales price per unit	\$19.00	\$20.00
Sales unit	500,000	400,000
Number of orders	1,000	1,000
Number of setups	2,000	6,000
Material cost per unit	\$8.00	\$10.00

Now the plant has implemented an activity based costing system. The following table presents the amounts from the old cost pools that are traced to each of the new activity cost pools.

Activity Cost Drivers	OLD COST POOLS				Total
	S1 \$	S2 \$	P1 \$	P2 \$	
P1 DLH	120,000	0	120,000	0	240,000
P2 DLH	240,000	0	0	120,000	360,000
Setups hours	816,000	80,000	240,000	540,000	1,676,000
P1 MH	0	260,000	120,000	0	380,000
P2 MH	0	780,000	0	120,000	900,000
Total	1,176,000	1,120,000	480,000	780,000	3,556,000

The management of Hibeem Electronics Corporation realised that despite R101 has always in good demand and sold higher volume as compared to R202, the financial records did not reflect the profitability of R101 and thus it always produced the lowest profit margin than R202.

Required

- Determine the product costs per unit using the old system. Show all intermediate steps for both Stage 1 and Stage 2 allocations including departmental cost driver rates and a breakdown of product costs into each of their components including the product gross margin in terms of dollars and percentage. (15 marks)
- Determine the product costs per unit using the new system and a breakdown of product costs into each of their components including the product gross margin in terms of dollars and percentage. (15 marks)
- Briefly describe why the old costing system has overcosted the high volume product and undercosted the low volume product. (10 marks)
- Explain the intuitive reason that the product costs differ under the two accounting systems. (10 marks)
- What should Hibeem Electronics Corporation do to improve the profitability of its Fisburn plant after the implementation of the new system? Your answer should be based on your recommendations to the sales & marketing director and production director of Hibeem Electronic Corporation who is about to draw up a new budget plan. (10 marks)
- Describe any of the four (4) limitations in implementing the activity based costing. (10 marks)

[Total 70 marks]

PART B : SHORT ANSWER QUESTIONS (30 MARKS)

INSTRUCTION (S) : There are FIVE (5) questions in this section, answer only THREE (3) questions. Write your answers in the Answer Booklet(s) provided. The total marks allocated for each of the questions are shown within brackets.

QUESTION 1

A company's budgeted profit statement for the production and sale of 25,000 units of its single product, for the next period is as follows:

	Per unit		Total	
	\$	\$	\$	\$
Sales		42.00		1,050,000
Less:				
Operating costs:				
Direct material	14.40		360,000	
Direct labour	10.00		250,000	
Variable overhead	5.00		125,000	
Fixed overhead	8.19	<u>37.59</u>	204,750	<u>939,750</u>
Net Profit		<u>4.41</u>		<u>110,250</u>

Required

Calculate for the next period, the:

- Budgeted break-even point (in sales revenue). (3 marks)
- Budgeted margin of safety (expressed as a percentage). (2 marks)
- Total sales revenue required to earn a net profit of \$217,350. (3 marks)
- List any two (2) of the limiting assumptions of cost-volume-profit analysis. (2 marks)

[Total 10 marks]

QUESTION 2

Briefly describe the management accounting tools and techniques which have become increasingly important in contemporary operational environments:-

- Target costing
- Kaizen costing
- Life cycle costing

[Total 10 marks]

QUESTION 3

Briefly describe the characteristics of Just-in-time (JIT) system. Discuss how a manufacturer's decision to implement JIT manufacturing may affect the creation and capture of surplus value across an industry.

[Total 10 marks]

QUESTION 4

Explain what is meant by the balanced scorecard and why it is regarded as superior to conventional methods of performance evaluation.

[Total 10 marks]

QUESTION 5

a) Define the following terms used in relevant costs:

- Incremental costs
- Avoidable costs and unavoidable costs
- Opportunity costs
- Sunk costs
- Committed costs
- Notional costs

[Total 10 marks]

END OF QUESTION PAPER