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FACULTY OF BUSINESS

FINAL EXAMINATION

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

Course Code & Name : **ACC3223 STRATEGIC MANAGERIAL ACCOUNTING**
Semester & Year : SEPTEMBER – DECEMBER 2024
Lecturer/Examiner : JAMES LIOW
Duration : 3 Hours

INSTRUCTIONS TO CANDIDATES

1. **This question paper consists of 1 part:**
   PART A (100 marks) : Answer all FOUR (4) compulsory 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 QUESTIONS (100 MARKS)**

INSTRUCTION (S) : There are **FOUR (4)** compulsory questions in this part. Answer **ALL** questions. Write your answers in the Answer Booklet(s) provided.

QUESTION 1
Section A

Iceberg Cube Bhd (ICB) consists of two divisions A and B. Market demand for Division B's product is 80,000 units sourced from Division A and Division A meets this demand in full.

Division A's manager set the transfer price to Division B at the same price they charge to external customer at RM95 per unit. Manager at the Division B is unhappy with that decision and because of that Division B has not been making much profits. They claim that Division A should have charged a lower price than its external customers as the plant still have the spare capacity to produce for Division B.

After negotiation with both the divisions, the new proposed transfer pricing system for Division A agreed at variable costs and a lump sum payment amounting to 150% of Division A's fixed factory overheads based on the production of 80,000 units.

The following are the information for both the divisions:

	Division A (RM)	**Division B (RM)**
Selling price	95.00	200.00
Variable costs:		
- Direct materials	25.00	15.00
- Direct labour	10.00	20.00
- Factory overheads	15.00	5.00
Annual fixed factory overheads (RM)	2,000,000	4,800,000
Annual external demand (units)	20,000	80,000
Capacity of plant (units)	150,000	100,000

Required

a) Under the current transfer pricing system, prepare a profit statement showing the contribution margin and profit for each of the divisions and for ICB as a whole. *(The sales and costs figures should be split into external sales and inter-divisional transfers, where appropriate).* (7 marks)

b) Under the proposed transfer pricing system, calculate the transfer pricing per unit set by Division A. (2 marks)

c) Under the proposed transfer pricing system, prepare a profit statement showing the contribution margin and profit for each of the divisions and for ICB as a whole. *(The sales and costs figures should be split into external sales and inter-divisional transfers, where appropriate).*

(5 marks)

d) Justify whether the two divisions and ICB as a whole would accept this new arrangement.

(3 marks)

e) Assuming Division A has no spare capacity to produce and is required by ICB to release the capacity for Division B, determine the minimum transfer price to be charged to Division B.

(2 marks)

[Section A: 19 marks]

Section B

Ace Apparels Bhd (AAB) manufactures and sells children apparels. The company's management is concerned about the quality of their product and has requested the management accountant to identify all the quality related costs and submit a report.

AAB has classified the following cost of quality:

Type of Costs	Description
Prevention	- Provide technical support to suppliers of materials used in the manufacture of apparels. - Required employees to undergo minimum of 128 hours of quality training to ensure they possessed with the up-to-date knowledge and technology. - Carry out development of quality testing of all processes at the manufacturing plant.
Appraisal	- Conduct product design reviews and assessments in product development process. - Inspect finished goods for any damage before delivering to customers.
Internal failure	- Machine breakdown due to improper maintenance. - Product rework that fails to meet certain standard.
External failure	- Customer support to handle customers' complaints and to ensure sales is not lost through repeat sales. - Product returns/rejects due to defective parts.

The following list of quality costs have been identified by the accountant for the financial year ended 31 December 2023:

Cost Categories	RM'000
Technical support to suppliers	6,000
Finished goods inspection	25,000
Product design reviews	12,000
Quality testing	5,000
Rework of defect products	9,000

Machine breakdown	15,000
Employee quality training	35,000
Customer complaints	20,000
Returned goods by customers	10,000

Sales revenue for the company is RM950 million for the financial year ended 31 December 2023.

Required

a) Produce a Cost of Quality (COQ) Report for AAB showing total quality costs for each category, total costs of conformance, total costs of non-conformance and in total. (3 marks)

b) Compute the following:
   (i) Total costs of quality as a percentage of sales
   (ii) Ratio of costs of conformance to total costs of quality
   (iii) Ratio of costs of non-conformance to total costs of quality

(3 marks)

(Section B: 6 marks)

[Total 25 marks]

QUESTION 2

Star Garments Bhd (SGB) is a large manufacturing company specialising in the manufacture of a wide range of sports clothing and equipment. The company has two divisions: Clothing (Division C) and Equipment (Division E). Each division operates with little intervention from Head Office and divisional managers have autonomy to make decisions about long-term investments.

SGB measures the performance of its divisions using return on investment (ROI), calculated using controllable profit and divisional net assets. The target ROI for each of the divisions is 18%. If the divisions meet or exceed this target the divisional managers receive a bonus.

The last year performance for the company's two divisions for the year ended 31 December 2023 is as follows:

Division	**Net profit (RM)**	**Net assets (RM)**
Division C	1,160,000	11,000,000
Division E	3,950,000	27,000,000

Note:

(i) Included in the fixed costs are depreciation costs of RM165,000 and RM460,000 for Divisions C and E respectively. 30% of the depreciation costs in each division relates to assets controlled by Head Office.

(ii) Head Office recharges all of its costs to the two divisions. These have been included in the fixed costs and amount to RM620,000 for Division C and RM700,000 for Division E.

After the above last year performance, one possible extra project was identified for each division. These projects would commence on 1 January 2024, and each divisional manager must decide by that date as to whether or not to accept his or her division's possible extra project.

The target ROI for the extra project is based on each division's last year performance for 2023. Details of these possible extra projects (which would continue for several years if accepted) are as follows:

Division C

Division C could increase its market share. This would result in extra sales of RM180,000 in 2024 and RM200,000 in each subsequent year. The profit margin on sales would be 19%.

The division plan to invest RM100,000 in delivery vehicles in 2024 at a depreciation rate of 20% per annum on a diminishing balance basis. An additional working capital investment of RM25,000 each year would also be required.

Division E

The productivity improvement would result in increased sales of RM200,000 in 2024 and RM250,000 in each year thereafter. The profit margin on sales would be 20%, before taking account of depreciation.

The Division E could invest RM150,000 in new technology in 2023 which would improve the productivity of the division's manufacturing facilities. This extra investment would be depreciated on a straight-line basis over a 5-year life. An additional investment of RM60,000 each year in the division working capital would also be required.

Required

a) Calculate the return on investment of the two divisions based on 2023 results. (4 marks)

b) Calculate the return on investment for 2024 and 2025 of the two divisions based on the extra projects. (10 marks)

c) Explain whether each divisional manager is likely to accept his or her division's proposed extra projects based on item (b) above and what decision would be in the best interests of the company's shareholders in each case. (5 marks)

d) Assuming that Star Garments Bhd uses residual income (RI) to evaluate performance and desires a minimum 5% return per annum on invested assets. Compute the residual income for 2024 of the two divisions of the extra projects. (4 marks)

e) Based on the RI calculated in item (d), comment on the performance of the two divisions. (2 marks)

[Total 25 marks]

QUESTION 3

Mun Hong Bhd produces 3 products, Xero, Yoyo and Zappa. All products are produced using the same materials, machinery and a skilled labour force. The details of the budgeted selling price and cost price are shown below:

	Xero (RM)	Yoyo (RM)	Zappa (RM)
Selling price	200.00	300.00	280.00
Direct material	100.00	180.00	200.00
Direct labour	60.00	70.00	40.00
Variable production overheads	10.00	20.00	12.00
Fixed production overheads	5.00	10.00	23.00
Total costs	175.00	280.00	265.00
Profit	**25.00**	**20.00**	**15.00**

The machine required and the budgeted production units are as follows:

	Xero	Yoyo	Zappa
Production (units)	600	500	400
Required machine minutes:			
Machine 1	5	4	3
Machine 2	4	5	3
Machine 3	3	6	3

The maximum capacity of the machine minutes for each machine is as follows:

	Machine 1	Machine 2	Machine 3
Time (minutes)	7,000	6,200	5,800

Required

a) Identify which machine produces the bottleneck and calculate the shortage or excess of machine minutes. (6 marks)

b) Calculate the total cost per factory minutes *(round to 2 decimal places).* (4 marks)

c) Calculate the throughput accounting ratio for the three products *(round to 2 decimal places)* and rank the profitability of the three products. (6 marks)

c) Using throughput accounting that you have calculated in part (c), prepare the optimum production units given the bottleneck minutes. (5 marks)

d) Based on the optimum production units, calculate the maximum profit of Mun Hong Bhd.

(4 marks)

[Total 25 marks]

QUESTION 4

Lost Peak Resort (LPR) is located at Janda Baik, Pahang and has been for many years a small, family-owned resort serving campers from nearby towns.

LPR was recently acquired by Western Resorts (WR), a major resort operator. The new owners have plans to upgrade the resort into a destination resort for vacationers. As part of this plan, the new owners would like to make major improvements in the Jungle Cafe, the resort's on-the-hill cafeteria. The menu at the Jungle Cafe is very limited – hamburgers, hot dogs, sandwiches, nasi lemak, mee goreng, and packaged snacks. With little competition, the previous owners of the resort had felt no urgency to upgrade the food service at the cafe. If vacationers want lunch in the jungle, the only alternatives are the Jungle Cafe or a pack lunch brought from home.

As part of the deal when acquiring LPR, WR agreed to retain all of the current employees of the resort. The manager of the Jungle Cafe, while hardworking and enthusiastic, has very little experience in the restaurant business. The manager is responsible for selecting the menu, finding and training employees, and overseeing daily operations. The kitchen staff members prepare food and wash dishes. The dining room staff members take orders, serve as cashiers, and clean the dining room area.

Vacationers have always complained about the long waiting time for the staff to take order and for the food to be ready to serve. Cleanliness at the dining area has not been cleaned regularly or just left it unattended after the vacationers have left the table. Staff absenteeism is high and sometime late in reporting work.

Shortly after taking over LPR, management of WR held a day-long meeting with all of the employees of the Jungle Cafe to discuss the future of the resort and the new management's plans for the cafe. At the end of this meeting, management and employees created a balanced scorecard for the café that would help guide operations for the coming vacation season. Almost everyone who participated in the meeting seemed to be enthusiastic about the scorecard and management's plans for the cafe.

Required

a) Outline the **FOUR (4)** main perspectives (sections) of a balanced scorecard that could be viewed on an organisation, as suggested by the Balanced Scorecard. (7 marks)

b) Explain how these four perspectives in the Balanced Scorecard are interrelated. Based on the above case, provide an example on the cause-and-effect relationship for Lost Peak Resort. (10 marks)

c) Suggest **TWO (2)** metrics each under the four perspectives of the Balanced Scorecard to evaluate the performance of the employees. (8 marks)

[Total 25 marks]

END OF QUESTION PAPER