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FACULTY OF BUSINESS

FINAL EXAMINATION

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

Course Code & Name : **ACC3213 MANAGERIAL ACCOUNTING**
Semester & Year : MAY – AUGUST 2022
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.

Doggies Kennel Sdn Bhd manufactures a range of products for pets. Over the past two years the company has been very successful with one of its products, a deluxe dog kennel, which is now being exported to many countries in Asia.

The management accountant is preparing its budget for next year and has asked for your assistance.

Projected cost and other information relating to the year ending 31 December 2022 is shown below:

(i) The deluxe dog kennel has a selling price of RM70.00 per unit.

(ii) The marketing manager has forecast quarterly sales for the year as:

Quarter 1 (Units)	**Quarter 2 (Units)**	**Quarter 3 (Units)**	**Quarter 4 (Units)**
8,500	7,500	4,500	2,500

For Quarter 1 and Quarter 2 in 2023, sales are forecast to be 9,000 and 8,000 units respectively.

(iii) Product details for each deluxe dog kennel are as follows:

Direct materials
Wood: 3 square metres @ RM8.50 per square metre.
Insulation: 2 square metres @ RM1.20 per square metre.
Bolts: 20 large bolts @RM5.00 per 100 pack.

Direct labour
Machining department 0.25 hour @ RM16.00 per hour
Assembly and finishing department 0.50 hour @ RM18.00 per hour.

Variable production overhead
Machining department: RM3.00 per direct labour hour.
Assembly and finishing department: RM4.00 per direct labour hour.

Fixed production overhead
This is budgeted as RM171,315 for the year and is absorbed on the basis of total budgeted direct labour hours.

(iv) The production manager has provided details of opening inventory and closing inventory requirements:
From 1 January 2022, company policy is to ensure that closing inventory of finished kennels is 20% of the next quarter's sales.

To avoid delays in production the company holds closing inventory of wood and insulation equal to 10% of the next quarter's production requirement.

At the start of Quarter 1 2022, the company expects to have no finished kennels in inventory and the following direct materials in its warehouse:

	Opening inventory
Wood (square metres)	1,000
Insulation (square metres)	2,000

Bolts are purchased on a 'Just in Time' basis for use in production. Consequently, no opening or closing inventories of this item are held.

Required

Prepare the following master budget for the year ending 31 December 2022:

a) Sales budget by quarter and in total (value). (5 marks)

b) Production budget by quarter (units). (6 marks)

c) Direct material usage budget (quantity) and direct material purchase budget (value) for wood, insulation and bolts. (20 marks)

d) Direct labour utilisation (hours) and direct labour cost budget (value) for machining department and assembly and finishing department. (8 marks)

e) Calculate the budgeted product cost per unit. (9 marks)

f) Calculate the production cost budget by quarter (value). (2 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

Part A

Glow Workwear (GW) manufactures a range of high visibility workwear. Recently, the company has been experiencing strong demand for its products and the managing director is keen to optimise all resources available to maximise profits. Information relating to the company's products and resources for the month of July is shown below:

	Jacket	**Vest**	**Trousers**
Budgeted production (units)	7,200	14,000	9,000
Standard cost card	**RM**	**RM**	**RM**
Direct material (RM6.00 per metre)	15.00	7.20	18.00
Direct labour	11.25	3.75	7.50
Variable production overhead	3.00	1.00	2.00
Fixed production overhead (RM6.00 per direct labour hour)	4.50	1.50	3.00
Total product cost	**33.75**	**13.45**	**30.50**
Selling price per unit	47.50	21.35	42.00

Notes:

(i) Due to a problem with suppliers, the total amount of direct material available for use in production is 60,000 metres.

(ii) Fixed production overhead is absorbed based on 14,000 direct labour hours.

Required

a) Based on the information provided, calculate the shortage of direct material in metre. (2 marks)

b) Compute the optimal production schedule in units. (6 marks)

c) Calculate the net profit based on the production schedule. (3 marks)

d) A valued customer has placed an additional order for 2,000 units of each product. Assuming the company will fulfil this order first. Compute the revised production plan in units for July.

(8 marks)

(Part A: 19 marks)

Part B

Yusof Catering (YC) manufactures and supplies 50,000 cups of ice cream to schools each month. The monthly manufacturing costs of ice cream are as follows:

	RM
Direct materials	100,000
Direct labour	150,000
Variable manufacturing overheads	80,000
Fixed manufacturing overheads	120,000
Total manufacturing costs	**450,000**

If YC is able to buy ice cream of the same quality from outside suppliers for RM7.50 each, it will be able to reduce its fixed manufacturing overheads by RM20,000.

Required

a) In each of the manufacturing costs including the reduction of the fixed manufacturing overheads, indicate whether they are relevant costs or sunk costs. (2 marks)

b) Advise YC should the company make ice cream itself or buy it from outside suppliers? Your answers need to be supported by workings. (2 marks)

c) Calculate the amount YC could save on the decision made in part (b). (2 marks)

(Part B: 6 marks)

[Total 25 marks]

QUESTION 2

Part A

Jimmy Chew (JC) is considering to set up a business offering mobile service of shoe repairing in the commercial area using the car parks of the shopping centres and offers an as-you-wait shoe repair service from his van. He has visited the major employers in the area and having reached agreements with a number of large local businesses and having carried out surveys of his potential customers.

He has arrived at the following estimates for his first 4 months of business:

(i) He will start the business by investing RM150,000 of his own money in March 2022. In that month, he will purchase a second-hand van at a cost of RM90,000 and various machinery for RM30,000. The van would then be painted to advertise his business at a cost of RM7,000, payable in April 2022.

(ii) JC managed to secure an overdraft facility from I Bank Berhad of RM20,000 and the overdraft interest of 10% will be chargeable and payable in the following month if the closing balance is overdrawn.

(iii) He will commence business in April 2022 and expects sales to be as follows:

	RM
April	13,000
May	15,000
June	21,000

The sales are on a month's credit term.

(iv) The materials at a cost of RM38,500 will be purchased in the month of March 2022 and subsequently, the materials needed for the repairs would cost 30% of the sales price of each repair in order to maintain the inventories. All materials are payable on a month credit.

(v) Fuel expense will be RM800 per month from April 2022 onwards and motor insurance for the year to 31 March 2023 will be RM7,500, payable in April 2022.

(vi) JC will draw RM5,000 per month for his personal expenditures from April 2022.

Required

Prepare a cash budget for JC, on a monthly basis, for the four months period commencing 1 March 2022, clearly showing the closing cash balance at the end of each month. (10 marks)

Part B

Eva Bhd is a manufacturing of disposal gloves used in the medical industry. The company is considering an investment in new machinery. The annual profits/(losses) relating to the investment are estimated to be:

Year	RM
1	(11,000)
2	3,000
3	34,000
4	47,000
5	8,000

Investment at the start of the project would be RM175,000. The investment sum, assuming zero disposal value after five years, would be written off using the straight-line method. The depreciation has been included in the profit estimates above, which should be assumed to arise at each year end.

Assume that the company's required rate of return is at a discount rate of 10% per annum and the company's policy on payback period of any investment should not be more than 5 years.

Present value of RM1.00:

Discount rate	1	2	3	4	5
10%	0.9091	0.8264	0.7513	0.6830	0.6499
15%	0.8696	0.7561	0.6575	0.5718	0.4972

Required

a) Calculate the following:

(i) Accounting rate of return (2 marks)

(ii) Payback period (3 marks)

(iii) Net present value of the investment (3 marks)

(iv) Internal rate of return (3 marks)

b) Recommend whether Eva Bhd should undertake this project, giving reasons based on the investment appraisal that you have calculated in item (a) above. (4 marks)

(Part B: 15 marks)

[Total 25 marks]

QUESTION 3

Signature Tabletop Bhd (ST) manufactures high quality wooden table mats using beech sourced from sustainable forests. The company began trading two years ago having identified a niche market for the product, both in Ireland and Europe. During the year, ST was forced to purchase wood from a different company as the usual supplier did not have sufficient stock available.

The company operates a standard costing system and details relating to the most recent financial period are shown below:

Actual cost information:

Production in units	135,000 units
Direct materials	10,800 square metres beech wood at RM300,240
Direct labour hours	27,000 hours at RM486,000
Variable production overhead	RM194,400
Fixed production overhead	RM30,150

Standard cost information:

Production in units	134,400 units
Direct materials:	10,080 square metres beech wood at RM282,240
Direct labour:	33,600 hours at RM483,840
Variable production overhead	(based on direct labour hours) RM225,792

Fixed production overhead is budgeted at RM29,200. The standard fixed production overhead rate is at RM0.20 per unit.

Required:

a) Calculate the standard marginal cost for one table mat. (3 marks)

b) Calculate the following production cost variances for the period:

   (i) Direct material price (for each material)

   (ii) Direct material usage (for each material)

   (iii) Direct labour rate

   (iv) Direct labour efficiency

   (v) Variable production overhead expenditure

   (vi) Variable production overhead efficiency

   (vii) Fixed production overhead expenditure

   (viii) Fixed production overhead volume

(16 marks)

c) Outline **TWO** (2) possible reasons to explain the direct material variances as calculated in part (b) above. (6 marks)

[Total 25 marks]

END OF QUESTION PAPER