Private & Confidential

FACULTY OF BUSINESS

FINAL EXAMINATION

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

Course Code & Name	:	**ACC3213 MANAGERIAL ACCOUNTING**
Semester & Year	:	JANUARY – APRIL 2023
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.

QUESTION 1

Dunhill Berhad manufactures and sells a single product Exe, which uses direct material Bee in its production.

Projected cost and other information relating to the first five months of 2022 are shown below:

(i) The product Exe has a selling price of RM70.00 per unit.

(ii) The sales budget for the next five months period is as follows:

Month	**January**	**February**	**March**	**April**	**May**
Product (units)	9,500	9,700	10,100	10,200	12,500

(iii) Product details for each product Exe are as follows:

Production

- The opening stock of product Exe is expected to be sufficient to meet 20% of the budgeted sales for the month of January.
- The closing stock of product Exe at the end of each month should be equal to 25% of the following month's sales.

Direct material

- The quantity of direct material Bee required in the production is 9.0 kgs per unit.
- The opening stock of direct material Bee is expected to be 12,000 kgs.
- The closing stock of direct material Bee is expected to be increased by 10% of each month.
- The price for material Bee is expected to be RM 3.00 per kg.

Direct labour

- Machine department: 1.5 hours @ RM 9.00 per hour
- Assembly department: 1.25 hours @ RM 6.00 per hour

Variable production overheads

- Machine department: RM3.00 per direct labour hour
- Assembly department: RM4.00 per direct labour hour

Fixed production overheads

The 4 months fixed production overheads are budgeted at RM201,589 and is absorbed on the basis of total budgeted direct labour hours.

Required

Prepare the following master budget for the month of January to April 2022:

a) Sales budget by months and in total (value). (6 marks)

b) Production budget by months (units). (8 marks)

c) Direct material usage budget (units) and direct material purchase budget (value). (10 marks)

d) Direct labour utilisation (hours) and direct labour cost budget (value) for machine department and assembly department. (10 marks)

e) Variable production overheads budget (value) for machine department and assembly department. (6 marks)

f) Calculate the budgeted product cost per unit. (7 marks)

g) Calculate the production cost budget by month (value). (3 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

Sonic Precisions Bhd makes three separate components P, Q and R, uses in the assembly of its products.

Production capacity is limited to 14,000 machine hours during the next period, which will not be sufficient to meet the expected demand.

The following information relates to the three components for the next period:

Component	**P**	**Q**	**R**
Budgeted demand (units)	1,800	2,000	2,200
Selling price per unit	RM48.00	RM76.00	RM90.00
Direct materials per unit	RM4.00	RM6.00	RM8.00
Direct labour hours per unit	2.0	4.0	4.0
Direct labour rate per hour	RM8.00	RM8.00	RM8.00
Machine hours per unit	2.0	3.0	3.0
Fixed overheads per unit	RM30.00	RM25.00	RM15.00

Variable overheads are absorbed on direct labour hours at RM2.00 per hour.

Required

Based on the information provided:

a) Calculate the shortfall of machine hours capacity. (2 marks)
b) Compute the order of priority for production. (9 marks)
c) Compute the optimal production schedule in units. (5 marks)
d) Calculate the net profit based on the production schedule. (3 marks)

[Total Part A: 19 marks]

Part B

A company manufactures a single product, which is sold for RM65.00 per unit. The company is operating at 75% of its available capacity of 3,200 units in the current period.

The total production costs per period are RM275,200, of which 60% are variable costs. The company has received an enquiry about a one-off order for 500 units at RM79.00 per unit.

Required

Advise the company whether to accept the one-off order and using appropriate workings:

a) Calculate the balance of spare capacity. (2 marks)
b) Calculate the increase or decrease in contribution margin. (3 marks)
c) Advise the company whether it should accept the one-off order. (1 mark)

[Total Part B: 6 marks]

[Total 25 marks]

QUESTION 2
Part A
A retail company makes and sells a single product and is in the process of preparing its budgets for the three months commencing 1 January 2023.

The details of the product are as follows:

	RM per unit
Selling price	70.00
Variable production costs:	
Direct material	30.00
Direct labour	20.00
Variable overhead	15.00

The following budgeted information is also available:

	Nov 2022	**Dec 2022**	**Jan 2023**	**Feb 2023**	**Mar 2023**
Sales (units)	2,000	2,100	2,200	2,300	1,900
Production (units)	2,000	2,100	2,300	2,300	1,900

(i) 10% of the monthly sales are for cash. The remainder will be sold on credit. Debtors are expected to pay in the month following the sale.
(ii) Direct material would be purchased in the month of production and paid for two months later.
(iii) 75% of direct labour costs would be paid during the month in which they are incurred and the remaining 25% in the following month.
(iv) 50% of variable production overhead costs would be paid in the month in which they are incurred and the remaining 50% in the following month.
(v) Fixed overhead costs of RM30,000 per month (including depreciation of RM4,000) would be paid in the month in which they are incurred.
(vi) The company will purchase a new machine for RM60,000 in January, payable in three equal instalments during January, March and May 2023.
(vii) There is a tax liability of RM80,000 to be paid in March 2023.
(viii) The cash balance on 1 January 2023 is expected to be RM218,000 debit balance.

Required
Prepare a cash budget for each of the three months January, February and March 2023.

[Total Part A: 11 marks]

Part B

Sam Freight Forwarding Bhd is considering investing in a new machine in order to reduce operating costs over the next five years.

The annual profits relating to the investment are estimated to be:

	RM
Year 1	(80,000)
Year 2	150,000
Year 3	120,000
Year 4	165,000
Year 5	42,000

Investment at the start of the project would be RM800,000. The investment sum, assuming disposal value of RM35,000 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.

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 the company should undertake this project, giving reasons based on the investment appraisal that you have calculated in item (a) above. (3 marks)

[Total Part B: 14 marks]

[Total 25 marks]

QUESTION 3

Muhibbah Bhd operates a standard absorption costing system for its table mat product.

Budgeted data relating to the product for the period just ended was:

Standard production	Input	Price/rate
Direct material	3 kgs	RM38.50 per kg
Direct labour	2.5 hours	RM19.20 per hour
Fixed production overheads	2.5 hours	RM21.50 per hour
Variable production overheads	2.5 hours	RM12.50 per hour

Standard production and sales	2,500 units
Standard selling price	RM280 per unit

Actual results for the next period were as follows:

Production	3,040 units
Sales: 2,880 units sold	RM781,200
Direct material (purchased and used): 9,630 kgs	RM360,485
Direct labour: 7,120 hours costing	RM149,520
Fixed production overheads	RM138,650

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

b) Calculate the following variances for the period:

(i) selling price
(ii) sales volume profit
(iii) direct material price
(iv) direct material usage
(v) direct labour rate
(vi) direct labour efficiency
(vii) fixed overheads expenditure
(viii) fixed overheads volume

(16 marks)

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

[Total 25 marks]

END OF QUESTION PAPER