



## FINAL EXAMINATION

**COURSE : MANAGEMENT ACCOUNTING**

**COURSE CODE : PMA3143**

**DURATION : 2 HOURS**

### INSTRUCTIONS TO CANDIDATES:

1. This question paper consists of **THREE (3)** questions.
2. Answer ALL questions.
3. Please check to make sure that this examination pack consists of:
  - i. The Question Paper
  - ii. An Answer Booklet
  - iii. Appendix 1
4. Do not bring any material into the examination hall unless permission is given by the invigilator.
5. Please write your answer using ball-point pen.

**MYKAD NO :** \_\_\_\_\_

**ID. NO. :** \_\_\_\_\_

**LECTURER :** \_\_\_\_\_

**SECTION :** \_\_\_\_\_

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**DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO**

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*The question paper consists of 06 printed pages*

**2024/E/PMA3143**

**MAR2024/E/PMA3143****1. (12 points)**

BMT Sdn Bhd is a manufacturer that focuses on high-tech products. The company produces new portable storage drives currently sell for RM280 per unit. Currently, the company estimates it can be sold for a total of 13,500 units. The standard costs of the product are as follows:

	RM
Direct material - Component SDD	74.50
- Component 3.0 Drive USB	23.50
Direct labour	15.20
Other direct expenses	10.80
Manufacturing overhead	540,000 per annum
Selling and administration	351,000 per annum
Warehouse and distribution	240,000 per annum

Manufacturing overhead and selling and administration are mixed costs where 80% of the cost is fixed. Warehouse and distribution costs are fixed in nature and are based on allocation.

**Required:**

- Calculate breakeven point in units and RM. (7.5 points)
- Calculate margin of safety in RM. (1.5 points)
- Assume the company can reduce the total manufacturing overhead cost to RM405,000 per annum due to economies of scales. How many units must the company sell in order to obtain a profit after tax of RM4,800,000? Assume the tax rate is RM23%. (3 points)

(Note: Show all calculations.)

**2. (21 points)**

A. Zoomba Cake House is a company that produce cakes for local customers. The information regarding the selling price, demand and production capacity of its cake named Cinta Hati, Kasih Sejati and Sayang Kamu are given below.

	Cinta Hati	Kasih Sejati	Sayang Kamu
Selling price	RM50	RM40	RM35
Variable cost:	RM	RM	RM
Flour	8	6	5
Sugar	5	4	3
Egg	3	3	3
Salary (Chef 1)	5	5	5
Salary (Chef 2)	5	5	5
Labour hours required per unit of output	3 hours	2 hours	4 hours
Estimated sales demand	1,000 units	1,000 units	1,000 units
Total Labour hours for the month	3,000 hours	3,000 hours	4,000 hours

Because of a shortage of manpower, the labour hours for the month are limited to 8,000 hours, which is insufficient to meet the total sales demand.

**Required:**

Rank the products according to their profitability and determine the optimum production plan as per your calculation. (10.5 points)

B. Innovate Device Sdn Bhd is a manufacturing company that produces new technology power bank products that can last for one week for every full charge. The devices used a special material as their component, and currently they produce the material internally. Moreover, they estimate that they can normally produce 50,000 units per year. The annual production cost of the special materials used was given as follows:

	Cost for 50,000 units (RM)
Direct materials	2,750,000
Special tools	1,000,000
Skilled worker	750,000
Semi-skilled worker	500,000
Supervisory salaries	900,000
Depreciation of machine	250,000
Variable production overhead	400,000
Allocated general overhead	400,000
<b>Total Cost</b>	<b>7,645,000</b>

The company has been approached by Syarikat Multi Resources to supply the same material as they currently use to produce the power bank. The price offered is RM130.00 per unit for every purchase of 50,000 units.

Additional information:

- 50% of supervisory salaries can be absorbed into other functions, such as administrative and marketing.
- Innovate Device Sdn Bhd has only one production department.
- The machine used in the production has no resale value.

**Required:**

Should Innovate Device purchase the material from Syarikat Multi Resources or continue making their own special material as usual. Show all calculations. (10.5 points)

**3. (17 points)**

Cloudicism Sdn Bhd is a manufacturing company focused on adult winter clothes and linen. The following is information related to the standard data cost per unit for one of the product lines in the recent month:

<b>Items</b>	<b>RM</b>
Selling price	149.50
Direct material (RM12.50 x 2 ft.)	25.00
Direct labour (RM37.50 per hour)	12.50
Variable overhead (RM25.50 per hour)	8.50
Fixed overhead (RM50 per hour)	12.50
Estimated production and sales	1,500 units

During the month, the actual demand (produced and sold) is above the company's expectations. The production and marketing team managed to produce and sell 1,650 units of the product. Below is the actual data for the month:

	<b>RM</b>
Sales	246,675
Direct material (purchased at 3,400 ft. and used at 3,170 ft.)	79,560
Direct labour (550 hours)	21,010
Variable overhead	15,290
Fixed overhead	28,000

**Required:**

Calculate the following variance and indicate whether it is favourable (F) or adverse (A).

- Direct material quantity variance. (2.5 points)
- Direct labour rate and efficiency variance. (5.5 points)
- Variable overhead spending variance. (2.5 points)
- Fixed overhead volume variance. (2 points)
- Sales margin volume variance (4.5 points)

(Note: Show all calculations.)

**END OF QUESTION PAPER**

**APPENDIX 1**

**VARIANCE ANALYSIS FORMULA**

**COST VARIANCE**

- a.  $MPV = (AP - SP) \times AQ$
- b.  $MUV = (AQ - SQ) \times SP$
- c.  $DLRV = (AR - SR) \times AH$
- d.  $DLEV = (AH - SH) \times SR$
- e.  $VOSV = (AVOR - SVOR) \times AH$
- f.  $VOEV = (AH - SH) \times SVOR$
- g.  $FOEV = AFO - BFO$
- h.  $FOVV = (APN - BPN) \times SFOAR$

**SALES VARIANCE**

- a.  $SMPV = (ASP - SSP) \times \text{Unit Sold}$
- b.  $SMVV = (ASU - BSU) \times \text{Standard Profit per unit}$