UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2016/2017

COURSE NAME	:	INDUSTRIAL PRODUCTION COSTING
COURSE CODE	:	BWB 44203
PROGRAMME	:	BWQ
EXAMINATION DATE	:	JUNE 2017
DURATION	:	3 HOURS
INSTRUCTION	:	PART A : ANSWER **ALL** QUESTIONS PART B : ANSWER **TWO (2)** QUESTIONS PART C : ANSWER ONLY **ONE (1)** QUESTION

THIS QUESTION PAPER CONSISTS OF **EIGHT (8)** PAGES

PART A

Answer ALL questions

Q1 Explain the difference between weighted average method and "first in first out" method in costing process.

(5 marks)

Q2 Elaborate the importance of cost-volume-profit analysis to the management of a company.

(5 marks)

Q3 Explain why a flexible budget is better than a static budget as performance measurement tool.

(5 marks)

Q4 Differentiate between an ideal standard and a practical standard in standard cost.

(5 marks)

Q5 Identify the differences between job order and costing process.

(5 marks)

PART B

Part B consists of THREE (3) questions. Answer TWO (2) questions only.

Q6 Cergaz Sdn. Bhd. is in the process of preparing its budget for the first quarter of year 2013. At the same time, the management is also applying RM30,000 loan from Bank CC for its business expansion. Below are the relevant data that have been collected:

- On 1st January, the beginning of the first quarter, the company will have a cash balance of RM15,700.

- Actual sales for the last two months and estimated sales for the first quarter are described in **Table Q6 (a)** (all sales are credit sales):

Table Q6 (a) : Actual and Estimated Sales for the Last Two Months

Month	RM
November (actual)	31,000
December (actual)	64,500
January (estimated)	52,000
February (estimated)	73,100
March (estimated)	46,200

- Past experience shows that 25% of a month's sales are collected in current month, 70% will be collected in the following month and 3% in the second month after the sales. However, the balance is uncollectible.

- Computers of RM7,200 will be purchased by cash in the month of January 2013.

- The loan application of RM30,000 will be made in the month of January 2013 and the repayment will only start in March 2013. The interest on the loan is RM500.

- Estimated purchases and expenses for the first quarter are given in **Table Q6 (b)** :

Table Q6 (b) : Estimated Purchases and Expenses for the First Quarter

	January 2013 (RM)	February 2013 (RM)	March 2013 (RM)
Merchandise purchases	6,200	6,900	6,100
Electricity	5,200	5,400	5,900
Maintenance	4,300	4,500	4,700
Vehicle rental	4,500	4,500	4,500
Depreciation	6,700	6,700	6,700

All purchases made will be settled in the following month. Accounts payable of RM6,300 for the purchase made on 31 December 2012 will be paid in the month of January 2013.

(a) Based on the above information, you are required to prepare a cash budget for Cergaz Sdn. Bhd. for the months of January, February and March.

(21 marks)

(b) 'Budget is an important resource allocation tool for an organisation.' Explain the above statement.

(4 marks)

Q7 Cheyat Sdn Bhd. produces a product that will go through two departments: Mixing and Cooking. Both departments use the weighted average costing method. In the Mixing Department, all direct materials are added at the beginning of the process. All other manufacturing inputs are added uniformly throughout the process. The following information pertains to the Mixing Department for June:

Beginning work in process, June 1 : 200,000 pounds, 100 percent complete for direct materials and 50 percent complete for conversion costs. The costs assigned to this work are as in **Table Q7 (a)** :

Table Q7 (a) : The Assigned Cost

Direct materials	RM40,000
Direct labour	RM20,000
Overhead	RM60,000

Ending work in process, June 30: 100,000 pounds, 100 percent complete for direct materials and 60 percent complete for conversion costs.

Units completed and transferred out: 740,000 pounds to Cooking Department.

The following costs were added during the month as in **Table Q7 (b)** :

Table Q7 (b) : The Added Cost

Direct materials	RM422,000
Direct labour	RM200,000
Overhead	RM540,000

(a) Compute the equivalent unit for direct materials and conversion costs.
(5 marks)

(b) Compute the cost per equivalent unit of direct materials, conversion costs and cost of unit completed and transferred out to Cooking Department.
(8 marks)

(c) Compute the cost of goods transferred out and the cost of ending work in process.
(8 marks)

(d) What are the disadvantages of using weighted average costing method?
(4 marks)

Q8 Standard variable cost card for one unit of product is shown as in **Table Q8 (a)**. The following is the information of standard cost for making D'Cake by Deli Café.

Table Q8 (a) : Standard Cost Rate Per Unit

Item	RM
Direct Material: 2kg x RM28 per kg	56.00
Direct labour: 26 hours x RM20 per hour	520.00

Additional information on the company operation is as shown in **Table Q8 (b)**.

Table Q8 (b) : Additional information

Item	RM/ units
Materials purchased	23,000 kg for RM630,200
Materials used	14,000 kg
Units produced	6,700 units
Direct labour	168,000 hours (direct labor cost of RM 1,680,000

Based the information in **Q8**, you are required to answer the following questions:

(a) Explain

(i) the meaning of standard cost, and

(2 marks)

(ii) the relationship between standard cost and variance analysis.

(2 marks)

(b) Calculate the following variances. Determine whether each variance is Favourable (F) or Unfavourable (U):

(i) Direct material price variance,

(4 marks)

(ii) Direct material quantity variance,

(4 marks)

(iii) Direct labour rate variance,

(4 marks)

(iv) Direct labour efficiency variance.

(4 marks)

(c) Based on your answer in **Q3 (b) (iv)** above, discuss the possible reasons for a company to have an unfavourable direct labour efficiency variance.

(5 Marks)

PART C

Part C consists of TWO (2) questions. Answer ONE (1) question only.

Q9 Asli Bhd. produces and sells cameras. The selling price is RM150 per camera and the estimated annual sales volume is 23,000 units. The production, sales and administration costs are described as in **Table Q9**.

Table Q9 : Production, Sales And Administration Cost

Items	RM
Variable cost per unit:	
Direct materials	31.50
Direct labour	15.50
Manufacturing overhead	9.50
Selling expenses	3.50
Total unit variable cost	60.00
Fixed cost per year:	
Manufacturing overhead	576,000
Sales and administration	828,000
Total fixed cost	1,404,000

(a) Calculate the break-even point for Asli Bhd. in units and RM.

(5 marks)

(b) Calculate the margin of safety in units and RM.

(3 marks)

(c) If the company wants to achieve a net income of RM1,499,940, how many units of camera must be sold?

(5 marks)

(d) Suppose that the company is considering an investment in new technology that will increase fixed cost by RM200,085 per year but will lower variable costs to 30 percent of the selling price. Units sold remain unchanged. If the investment is made, what is the new break-even point?

(5 marks)

(e) Why it is said that cost-volume-profit analysis is only meaningful if the assumptions of this analysis are fulfilled?

(7 marks)

Q10 BSE Sdn Bhd manufactures 50,000 units of components per year. The manufacturing cost per unit of the components is as in **Table Q10**.

Table Q10 : Manufacturing cost per unit for BSE Sdn Bhd

Item	RM
Direct materials	20.00
Direct labour	20.00
Variable overhead	12.00
Fixed overhead	18.00
Total unit cost	70.00

Assume that the fixed overhead reflects the cost of BSE's manufacturing facility. This facility cannot be used for any other purpose. An outside supplier has offered to sell the component to BSE for RM 54.00 per unit.

(a) What is the effect on income if BSE purchases the component from the outside supplier?

(10 marks)

(b) Assume that BSE can avoid RM 150,000 of the total fixed overhead costs if it purchases the components. What is the effect on income if BSE purchases the component from outside supplier?

(10 marks)

(c) What are the qualitative factors that need to be considered when making the decision on whether to accept or reject the supplier's offer?

(5 marks)

- END OF QUESTIONS –