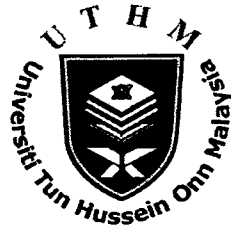


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**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER II  
SESSION 2011/2012**

**COURSE NAME : PRODUCTION OPERATION  
COSTING**

**COURSE CODE : BPC 32603**

**PROGRAMME : 3 BPB**

**EXAMINATION DATE : JUNE 2012**

**DURATION : 3 HOURS**

**INSTRUCTION : ANSWER ALL QUESTIONS**

**THIS QUESTION PAPER CONSIST OF FIVE (5) PAGES**

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- Q1** The following **Table Q1** is information on production operation of Best Foods Manufacturing Sdn Bhd for the year 2011.

**Table Q1:** Production operation costs for the year 2011

Item	RM	Item	RM
Work in process inventory on 1/1/2012	300,400	Insurance expenses (25 % is for general administration)	10,000
Direct raw material inventory on 1/1/2012	54,400	Direct labor costs incurred	20,500
Finished goods inventory on 1/1/2012	20,300	Indirect labor costs incurred	15,600
Purchase of direct material during the year	40,500	Depreciation costs (RM200 is for general administration)	10,000
Direct material inventory on 31/12/2012	10,000	Indirect material used	5,400
Work in process inventory on 31/12/2012	23,200	Utilities costs (RM700 is for general administration)	5,000
Finished goods inventory on 31/12/2012	15,200		

Required:

- (a) Construct Manufacturing Costs Statement which shows the costs of goods manufactured for the period ended 31/12/2011. (10 marks)
- (b) Calculate cost of goods sold for the period ended 31/12/2011. (5 marks)
- (c) Calculate additional prime and conversion costs for the period ended 31/12/2011. (4 marks)
- (d) Explain **THREE (3)** purposes of preparing cost of goods manufactured statement. (6 marks)

- Q2** The following production information in Table Q2 was gathered from Hard-Tech Sdn Bhd, a company which produces automotive parts for Japanese car manufacturer. There were 4 types of part code name X1, X2, X3 and X4.

**Table Q2: Production Information**

Types of part	X1	X2	X3	X4
Total output ( units)	2,250	660	2,200	2,120
Cost per batch (RM):				
<i>Direct material</i>	11,650	7,750	22,100	9,900
<i>Direct labour</i>	5,200	2,520	9,880	4,400
Cost Driver Volumes	X1	X2	X3	X4
Machine hours	920	455	510	625
No. of materials movements	880	100	405	200
No of requisition raised	80	30	60	40
No. of inspections	35	12	13	18
No. of set ups	25	8	15	13
Engineering hours	85	58	32	45
Production activities	Total Overhead Cost (RM)			
Machine related costs	44,600			
Material handling & dispatch	19,800			
Warehouse	19,250			
Quality Control	17,850			
Set-up	18,200			
Engineering services	15,300			

Required:

- Calculate cost driver overheads rate for each activities. (5 marks)
- Analyze cost per unit using 'ABC costing method' for each types of part produced. (10 marks)
- Explain the concept of 'cost driver' as a basis for allocating overhead under the ABC costing method. (4 marks)
- Evaluate the advantages of ABC costing method over the traditional costing method. (6 marks)

- Q3** The following **Table Q3** is information on production operation extracted from Syarikat Pro-Chem Sdn Bhd, a company which produces chemical compound for resin-based products.

**Table Q3: Mixing Department Process Costing Information**

	March 2012	April 2012
<b><i>Physical units for the period</i></b>	Units	Units
OWIP	0	120
Started during the month	550	500
Completed and transferred out	430	420
EWIP	120	80
<b><i>Total costs for the period</i></b>	RM	RM
Direct material costs added	35,000	30,000
Conversion costs added	45,000	48,000
<b>Degree of completion for EWIP :</b>		
Direct material	100%	100%
Conversion Costs	70%	65%

**Note:**

- OWIP = Opening balance of works in process  
 EWIP = Ending balance of works in process  
 WIP = Works in process  
 EU = Equivalent Units

Required:

- (a) Calculate physical flow of productions for March and April 2012. (5 marks)
- (b) Calculate costs of mixing department for the month of March and April. (show all cost details for EU, completed unit and EWIP) . (10 marks)
- (c) Explain the purpose of EU measurement in process costing. (4 marks)
- (d) Compare the different between *Process Costing* and *Job Costing*. (6 marks)

- Q4** Greenpack Sdn Bhd is currently manufacturing consumer products for domestic and export markets. Due to a capacity constraint in machine model B314, the company need to streamlining operation and focusing on the product which is giving higher return. The same machine is currently running on 100% utilization and producing 2 types of main product as depicted in **Table Q4**.

**Table Q4: Data of Product A and B**

Data	Product A	Product B
Selling price / unit	RM 75/unit	RM 80/unit
Variable Costs / unit	RM 35/unit	RM 36/unit
Demand per week (units)	3,200 units	2,700 units
Process time required on machine B314 (minute)	0.48 minute	1.00 minutes
Total machine hours per day is 9 hours and operating for 6 days per week.		

Required:

- (a) Compare contribution margin on machine constraint resources for product A and product B. (6 marks)
- (b) Propose an allocation of machine constraint resources for product A and product B. (8 marks)
- (c) Justify in term of gross profit (RM) on which product should the company give more priority to produce under the machine constraint resources. (6 marks)
- (d) Explain the important of '*relevant costs*' concept for decision making in production operation environment. (5 marks)

**END OF QUESTION PAPER**