

# Faculty of Islamic Economics and Finance Semester I, 2020/2021 Academic Session

# **Final Examination Question Paper**

Course Code: BF3304

Course Name: Management Accounting

Course Level: Bachelor of Science in Islamic Finance,

**Bachelor of Business Management** 

Time : 3 hours

### **Notes:**

- 1. This examination is divided into **Two** (2) Sections with 60 Marks
- 2. Write ALL of your answers in the answer booklet provided
- 3. Section A consists of **three** questions with 30 marks. Answer ALL the questions
- 4. Section B consists of **three** questions with 30 marks. Answer only TWO questions out of Three questions
- 5. Candidates are not allowed to take the Answer Booklet out of the examination venue.



# SECTION A: ANSWER ALL OF THE QUESTIONS (30 MARKS)

## **QUESTION 1** (10 Marks)

Hewlett Packard Company must decide, whether to make or buy some pf its components from Sole Corp. The cost of producing 50,000 electrical connectors for its printers is \$165,000 broken down as follows:

Direct materials	\$90000
Direct labour	\$40000
Variable manufacturing overhead	\$22000
Fixed manufacturing overhead	\$13000

Instead of making the electrical connectors at an average cost per unit of \$3.30, the company has an opportunity to buy the connectors at \$3.00 per unit. If the connectors are purchased, all variable costs and one half of the fixed costs will be eliminated.

## Required

(a)	Prepare the incremental analysis showing whether the	(3 Marks)
	company should make or buy the electrical connectors	(a a a d )
(b)	Will your answer be different if the released productive	(3 Marks)
` .	capacity resulting from the purchase of the connectors will	
	generate additional income of \$25000	
(c)	What steps are frequently involved in management's	(2 Marks)
	decision making process	
(d)	Define the term 'opportunity cost' and how may this cost be	(2 Marks)
` '	relevant in a make – or – buy decision?	

# **QUESTION 2** (10 Marks)

Marlowe Corporation makes a mechanical stuffed alligator that sings the national anthem. The following information is available for Marlowe Corporation's anticipated annual volume of 500,000 units

	Per unit	Total
Direct materials	\$7	
Direct labour	\$9	
Variable Manufacturing overhead	\$15	
Fixed manufacturing overhead		\$3,300,000
Variable selling administrative expenses	\$14	
Fixed selling and administrative expenses		\$1,500,000

The company has a desired ROI of 25%. It has invested assets of \$24,000,000

## Required

(a)	Compute the total cost per unit	(2 Marks)
(b)	Compute the desired ROI per unit	(3 Marks)
(c)	Compute the markup percentage using total cost per unit	(2 Marks)
(d)	Compute the target selling price	(1 Marks)
(e)	What is target cost, and how does management use it	(2 Marks)

### **QUESTION 3 (10 Marks)**

J limited sells a single product at a mark up of 25%. The following information is available:

### 1) Sales revenue:

2017	\$
November	150,000
December	180,000

2018	\$
January	200,000
February	210,000
March	225,000
April	240,000

- 2) All sales are on credit and customers have a credit period of 2 months.
- 3) All purchases are on credit and suppliers are paid in the month following purchases.
- 4) Inventory level at the end of each month will be maintained at 25% of the sales volume in the following month.
- 5) Monthly operating costs are expected to be \$18 000, which includes \$3000 depreciation.
- 6) Balance at bank at 1 January 2018 is expected to be \$4500.

# Required

- (a) Prepare the cash budget for **each** of the three months from January to March 2018
- (b) Prepare a budgeted income statement for the three month period ending 31 March 2018

#### **Additional Information**

The directors are considering investing \$60 000 in a new computer system to improve inventory control. According to the payment terms, 50% is payable in March 2018 and the remaining 50% in the following month.

# Required

(a) Advise the directors whether or not they should purchase the (2 Marks) new computer. Justify your answer

# SECTION B: CHOOSE ANY TWO QUESTIONS (30 MARKS)

### **QUESTION 4** (15 Marks)

Rahel manufactures a single product X and wishes to know the break-even point.

Required

(a) What is meant by break-even point.

(1 Mark)

**Additional Information** 

The following budgeted information is available for product X

Selling price per unit \$2.00 Contribution to sales ratio 62.5% Fixed costs \$50,000 Production and Sales 100,000 units

Required

(b)	Calculate the break-even point in units and \$ revenue	(6 Marks)
(c)	Prepare a break-even chart for product X	(4 Marks)

### **Additional Information**

Rachel is considering opening another factory to produce two new products: Y and Z.

The following information is available:

Ý	)%	Y (\$ per unit)	Z (\$ per unit)
Direct material;		2	4 .
Direct labour (\$ 5 per hour)	<b>,_f</b>	10	5
Variable overhead		1.5	1.5
Selling price		23	18

Forecast demand or April is 4000 units of Y and 6000 units of Z.

### Required

(d) Calculate the contribution per unit of each product Y and Z

(2 Marks)

### **Additional information**

During April, fixed costs are forecast to be \$60,000

### Required

(e) Calculate the forecast profit for the new factor for the month of April

### **QUESTION 5** (15 Marks)

Khalid owns a business making blankets. He currently uses a standard costing system.

Required

(a) What is Standard Costing?

(1 Mark)

#### **Additional Information**

For the year ending 31 August 2015 Khalid budgeted to sell 2700 blankets at \$40 each. Each blanket requires 1.5 meters of material at \$10 per meter and 30 minutes of labour. All of his workforce are employed full time and paid \$14 per hour.

For the year ended 31 August 2015 his actual sales were 2700 blankets. He used 4320 meters of material at a cost of \$34560 and 2025 hours of labour were required at a cost of \$24300.

Required

- (b) Calculate the following variances for the year ended 31 August (8 Marks) 2015
  - (i) The material price and quantity variances
  - (ii) The labour rate and efficiency variances
- (c) Discuss possible reasons why khalid's actual costs are different to (3 Marks) the budgeted costs

#### **Additional Information**

In an attempt to control costs, Khalid is considering to:

- 1 Stop the quality assurance checks usually made during the production process
- 2 Find a cheaper supplier for materials to make the blankets
- 3 Keep the selling price at \$40 per blanket

Required

(d) Recommend to Khalid which option or options should he choose. (3 Marks) Justify your answer

### **QUESTION 6** (15 Marks)

Wong Ho owns a small factory. A machine has started to break down regularly and needs to be replaced.

A replacement machine is expected to cost \$55 000. It is expected to last 5 years and will be depreciated using the straight-line method of depreciation. At the end of the period the machine will be scrapped with no residual value.

The following information is available for the replacement machine:

- 1 The selling price for each unit produced by the machine is expected to be \$40 for years 1 and this is expected to increase by 25% for year 3.

  There is no expected change for year 4.

  However, the selling price is expected to increase by a further 10% for year 5.
- The cost of production for each unit produced is expected to be \$20 for years 1 and 2. This will increase by 25% for year 3 and then remain unchanged.
- 3 The present value for the net cash flows for the years 1 to 5 have been calculated as follows:

Year	Discount Factor (14%)	Present Value (\$)
1	0.877	3683.40
2	0.769	6536.50
3	0.675	9483.75
4	0.592	14977.60
5	0.519	21019.50

### Required

- (a) Distinguish between the payback method of investment appraisal and the net present value method (2 Marks)
- (b) Calculate the expected net present value-for the replacement (1 Mark) machine
- (c) (i)Calculate the annual net cash flow for the year 1 to 5 for (5 Marks) the replacement machine
  - (ii)Calculate the payback period for the replacement machine (2 Marks)
- (d) Recommend whether or not Wong Ho should purchase the replacement machine. Justify your answer

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