International Islamic University Chittagong
Department of Business Administration
Program: BBA Semester: Spring 2018
Advanced Managerial Accounting (ACC-4807)
Final Examination

Time: 2Hours & 30 minutes **Full Marks: 50**

Instructions:

a) Answer any **five** (5) sets of questions.
b) One set of question must be completely answered before starting another set.

Question No. 1 **(2+2+6) = 10**

Future Corporation Makes filing cabinet and uses simple ABC system that it uses for internal decision making. The company has two overhead departments whose costs are as follows:

Manufacturing overhead.....$600,000
Selling & administrative overhead.....400,000
Total overhead costs.....$,1000,000

The company's ABC system has the following activity cost pools and activity measures:

Activity cost pools	**Activity measures**
Assembling units	number of units
Processing orders	number of orders
Supporting customers	number of customers
Other	not applicable

Distribution of resource consumption across activity cost pools

	Assembling units	Processing orders	Supporting customers	Others	Total
Manufacturing overhead	50%	35%	5%	10%	100%
Selling & administrative overhead	10%	45%	25%	20%	100%
Total Activity	1500 units	300 orders	200 customers		

Required:

i. Prepare a report showing the first stage allocations of overhead costs to activity cost pools.
ii. Compute the activity rates for the activity cost pools.
iii. Office Mart, a customer, ordered filing cabinet as following
Selling price.....$1050
Units ordered.....800
Direct materials.....$180 per cabinet
Direct labor.....$50 per cabinet
Number of orders.....7 orders
(a) Prepare a report showing the overhead costs for the order.
(b) Prepare a report showing product margin and customer margin for the order.

Question No. 2 **(5+5) =10**

a) Rains ltd. has two divisions Perth and Darwin. Selected data are as follows:

	Perth	Darwin.
Sales.....	$10000000	50000000
Net operating income.....	650000	2000000
Average operating assets	4000000	12000000

Required:

i. Compute the ROI for each division.
ii. Assume that the minimum required return for any division is 16%. Compute the RI for each division.
iii. Assume that each division is presented with an investment opportunity that would yield a rate of return of 18%, which division will probably accept the opportunity according to ROI? Or reject? Why?

b) Tulip Company, a whole sale distributor of DVDs, has been experiencing losses for some time, as shown by its most recent data.

Monthly income statement follows:

Sales.....$1500000
Less variable expenses.....588000
Contribution margin.....912000
Less fixed expenses.....945000
Net operating loss..... $ (33000)

Income statement segmented by geographic data is as follow:

	Geographic Markets		
	South	Central	North
Sales.....	$ 400000	$ 600000	$ 500000
variable expenses as percentage of sales	52%	30%	40%
Traceable fixed expenses	$ 240000	$ 330000	$ 200000

Required:

i. Prepare a segmented income statement for each segment and the company as a whole showing both amount and percent columns.
ii. The company's general manager believes that sales in the central geographic market could be increased by 12% if advertising were increased by $45,000 each month. Would you recommend the increased advertising? Show computations.

Question No. 3 **(5X2.5) = 10**

Assume that division A has a product that can be sold either to Division B of the same Company or to outside consumers. The manager of both Division are evaluated based on their own division's return on Investment (ROI) The manager are free to decide if they will participate in any internal Transfers. All Transfer prices are negotiated. Treat each Case independently.

	Case			
Division A:	**1**	**2**	**3**	**4**
Capacity in Units	50.000	300,000	100.000	200.000
Number of Units now being sold to Outside customers	46,000	300,000	75,000	200.000
Selling price per Unit on the outside Market	$100	$40	$60	$45
Variable cost per Unit	$63	$19	$35	$30
Fixed cost per Unit (based on capacity)	$25	$8	$17	$6
Division B:				
Number of Unit needed annually	10000	70000	20000	60000
Purchase Price now being paid to an Outside supplier Before any quantity discount	$92	$39	$60	

Required:

I. Refer to case 1 above assume that Division A can avoid $ 5 per unit in variable costs on any sales to division B. Will the managers agree to a transfer and if so, within that range will the transfer price be? Explain

II. Refer to case 2 above assume that Division A can avoid $4 per Unit in Variable cost on any sales to Division B. Would you expect any agreement between the two divisional managers over what the transfer price should be? Explain

III. Refer to case 3 shown previously. Assume that B Division is now receiving 8% quantity discount from outside supplier. Will the manager agree to transfer? if so, what is the range within which the transfer price would be?

IV. Refer to case 4 shown previously, Assume that B division wants A Division to provide it with 60,000 units of different product from the one that Alpha Division is now producing .The new product would require $21 per unit in variable costs and would require that Alpha division cut back production of its present product by 45,000 units annually. What is the lowest acceptable transfer price from Alpha Division's Perspectives?

Question No. 4 **(3+7) =10**

a) Define relevant costs and irrelevant costs with example. "Future cost is not always relevant cost" do you agree? Explain with example.

b) Sunmar Co. manufactures 20000 units of part R-5 each year for use on its production line..The cost per unit of part R-5 is as follows:

Direct materials.....	$ 5.80
Direct Labor.....	8.50
Variable manufacturing overhead.....	4.20
Fixed manufacturing overhead.....	10.00
Total cost per unit.....	$26.00

An outside supplier has offered to sell 20000 units of part R-5 each year to Sunmar Co. for $24 per part. If Sunmar co. accepts this offer the facilities now being used to manufacture part R-5 could be rented to another company at an annual rental of $160000. However, Sunmar Co. has determined that $6 of the fixed manufacturing overhead being applied to part R-5 would continue even if part R-5 were purchased from the outside supplier.

Required: Prepare computations to show the net dollar advantage or disadvantage of accepting the outside supplier's offer.

Question No. 5 **(2+8) =10**

a) Define: Opportunity cost and Sunk cost.

b) XYZ Company produces High-Power Calculator that it sells for $32 per unit. Operating at capacity, the company can produce 50,000 Calculators per year. Costs associated with this level of production and sales are given below:

Particulars	Per unit	Total
Direct Materials	$ 12	$ 6,00,000
Direct Labor	3	1,50,000
Variable manufacturing overhead	1	50,000
Variable selling and administrative overhead	5	2,50,000
Fixed manufacturing overhead	2	1,00,000
Fixed selling and administrative overhead	4	2,00,000
Total cost	**$ 27**	**$ 13,50,000**

An Overseas customer would like to make a one-time-only purchase of 12,000 units of Calculators at $25 per unit. This order would not affect regular sales and the order could be fulfilled using the company's existing capacity. For additional packaging to ship to overseas, the XYZ would require incurring $1.5 per unit; but they would be able to reduce variable selling costs to $3.00 per unit. If the order is accepted, by how much will the total profits be increased or decreased? Show computations.

Question No. 6 **(2+8) =10**

a) What are the different approaches of pricing of products?

b) ABC Fashions Inc. has designed a sports jacket that is about to be introduced in the market. Standard cost per jacket is $60. The following additional information is available:

- Selling, general and administrative cost will be $5 per jacket variable and $575,000 fixed per year.
- Only 27,000 hours of labor time is available per year and one jacket can be produced in 1.5 hours.
- An investment of $1500,000 will be necessary to carry inventories and accounts receivables and to purchase some new equipment.
- The company desires a 25% return on investment (ROI) in new product lines.

Required:

i. Using absorption costing approach to cost plus pricing compute the mark up to achieve 25% ROI if it sells all of the jackets it can produce using 27,000 hours of labor time.

ii. Using the markup compute the selling price per jacket.

iii. Assume that the company is able to sell all of the jackets that it can produce, prepare an income statement for the first year of activity and compute the company's ROI for the year on jacket.

iv. After marketing the jackets for several years, the company is experiencing a falloff in demand due to an economic recession. A large retail outlet will make a bulk purchase of jackets if its label is sewn in and if an acceptable price can be worked out. What is the minimum acceptable price for this order?

Question No. 7 **(3+3+4) = 10**

i. Define ABC system. What are the features that differentiate it from traditional system?

ii. What is Transfer pricing? Discuss various Approaches of Transfer pricing.

iii. Discuss the concept of Decentralization. What are the arguments for and against of Decentralization?