

**K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH,**  
**Vidyavihar, Mumbai- 400077**

**Program: PGDM-COMM (Batch2018-20), Trim-I**  
**Subject: Management Accounting**

**Maximum Marks: 50**

**Duration: 3 hours**

**Date: 17th September, 2018**

**Instructions**

**Q1 is compulsory, carrying 5 marks. Attempt any 3 questions from the remaining, each carrying 15 marks.**

Q1. Following are the actual statements of operating income for Microsoft and Procter & Gamble (in millions):

Microsoft		Procter & Gamble	
Revenue	\$60,420	Net sales	\$83,503
Cost of revenue	11,598	Cost of products sold	40,695
Research & development	8,164	Administration and selling expenses	25,725
Sales & marketing	13,039		
General and administrative	5,127	<b>Operating income</b>	<b>\$17,083</b>
<b>Operating income</b>	<b>\$22,492</b>		

Assume that the only variable cost for Microsoft is Cost of revenue and for Procter & Gamble is Cost of products sold.

1. Compute the contribution margin percent of both the companies.
2. Suppose each company increases its revenue by \$10 million. Compute the increase in operating income for each company.
3. What is the break-even point for both the companies?

Q2. Dana Corporation is a global manufacturer of highly engineered products. It frequently sub contracts work to other manufacturers, depending on whether Dana's facilities are fully occupied.

The following are the costs of making a part EC113, a key component of an emissions control system.

	Total cost for 65,000 units	Cost per unit
Direct materials	\$ 5,85,000	\$ 9
Direct labour	7,15,000	11
Variable factory overheads	6,50,000	10

Fixed factory overheads	1,95,000	5
<b>Total manufacturing costs</b>	<b>\$21,45,000</b>	<b>\$33</b>

Another manufacturer has offered to sell the same part to Dana for \$28 each. All the fixed overhead would continue if Dana bought the component except that the cost of \$130,000 pertaining to some supervisory personnel could be avoided.

1. Assume that the capacity now used to make parts will become idle if the parts are purchased. Should Dana buy or make the parts?
2. Assume that the idle capacity will either (a) be rented to a nearby manufacturer for \$25,000 for the year or (b) be used to make oil filters that will yield a contribution of \$15,000. What will be the best thing for Dana to do ?

Q3. Following are the Balance Sheets of A Ltd and B Ltd along with supplementary information :

Balance Sheet as on 31<sup>st</sup> March , 2018

<b>Liabilities</b>	<b>A.Ltd Rs.</b>	<b>B.Ltd Rs.</b>
Share capital (Rs 100 each)	2,00,000	3,50,000
Reserves	50,500	60,000
Profit & Loss A/c	12,250	102,200
Loans	11,250	14,800
Sundry Creditors	36,000	58,000
Provision for Taxation	20,000	15,000
Total	3,30,000	6,00,000
<b>Assets</b>	<b>A.Ltd Rs.</b>	<b>B.Ltd Rs.</b>
Goodwill	30,000	50,000
Building	1,20,000	2,40,000
Plant and Machinery	29,000	42,000
Stock	66,000	93,000
Debtors	85,000	1,75,000
Total	3,30,000	6,00,000

Additional Information:

Particulars	A Ltd.	B Ltd.
Sales	8,40,000	10,50,000
Stock on 31 <sup>st</sup> March , 2014	60,000	1,07,000
Gross Profit	2,10,000	2,50,000
Profit Before Interest and Tax	1,20,000	1,30,000
PAT	60,000	90,000
Total dividends	20,000	30,000

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You are required to compute the following ratios of both companies:

- Current Ratio
- Liquid Ratio
- Stock Turnover Ratio
- Return on Investment
- EPS
- DPS
- Dividend payout ratio
- Debt equity ratio

Also give your opinion on the financial performance of the companies.

Q4. From the following Trial Balance of Jyothi Ltd. as on 31<sup>st</sup> March,2018, prepare vertical Income Statement and vertical Balance Sheet :

	Rs. (‘000)	Rs.(‘000)
Equity share capital		11,00,000
Plant and Machinery	12,00,000	
Sales		37,00,000
Purchases	17,00,000	
Debtors	9,00,000	
Creditors		8,50,000
Wages	3,50,000	
Opening stock	1,20,000	
Salaries	1,80,000	
Advertisement	75,000	
Telephone charges	35,000	
Furniture	2,00,000	
Long term Investment	5,00,000	
Interest received		40,000
Interest paid	20,000	
Commission paid	60,000	
Loan		1,20,000
Interim dividend	50,000	
General Reserve		1,00,000
Cash at bank	3,20,000	
Bills receivable	2,00,000	
	59,10,000	59,10,000

Adjustments:

1. Stock on 31<sup>st</sup> March,2018 was valued at Rs. 3,00,000
2. Depreciate Plant & Machinery @ 20% and Furniture @ 10%

Q5. Nike produces the Air Court tennis shoe and the Air Max running shoe. Assume that one factory is the only facility that produces the shoes and Nike managers must decide how many shoes of each type to produce. Machine time is the measure of capacity in this factory, and there is a maximum of 10,000 hours of machine time. The factory can produce 9 pairs of Air Court shoes or 6 pairs of Air Max shoes in 1 hour of machine time.

The selling price per unit of Air Court and Air Max are \$70 and \$130 respectively.

The variable costs per unit of Air Court and Air Max are \$ 48 and \$ 90 respectively.

Show with necessary calculations, the most profitable choice for the company.