

## ***MGT 402 Cost Management Accounting***

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***A Mega File of Final term Solve Subjective***

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### **Question No: 49 ( Marks: 3 )**

The Midnight Corporation budget department gathered the following data for the third quarter:

	<b>July</b>
Projected Sales (units)	1,000
Selling price per unit (Rs.)	30
Direct material purchase requirement (units)	1,500
Purchase cost per unit (Rs.)	15
Production requirements (units)	800

Direct labor hours Rs. 1.5 per unit
Direct Labor rate Rs. 2.5 per direct labor hour
Fixed FOH is Rs. 2600, included depreciation Rs. 300
Selling and Admin expense 4% of sales

**Net Income before tax is as follows**

July	8,000
August	10,000
September	8,000

All sales and purchase are for cash and all expenses are paid in the month incurred. Assuming that the opening cash balance on July 01 is Rs. 40,000 and tax rate is 35%,

**Requirement:**

Prepare cash budget for the month of July.

**CASH BUDGET FOR THE MONTH OF JULY**

**CASH RECEIPTS**

<b>PARTICULARS</b>	<b>JULY (Rs.)</b>
<b>OPENING BALANCE</b>	<b>40000</b>
SALES	30000
NET INCOME AFTE TAX	2800
<b>TOTAL RECEIPTS</b>	<b>72800</b>
<b>CASH PAYMENTS</b>	
PURCHASES	22500
DIRECT LABOR	3000
FIXED FOH	2300
SELLING AND ADMIN EXP	1200
<b>TOTAL PAYMENTS</b>	<b>29000</b>
<b>TOTAL RECEIPTS – TOTAL PAYMENTS</b>	<b>43800</b>

**Question No: 50 ( Marks: 3 )**

Why is the selection of an appropriate cost allocation method in Joint Products important?

**ANSWER**

The selection of an appropriate cost allocation method in joint products is important in order to know approximately exact cost of each product. Following are the factors which are more contributing to its importance

- (1) To know the profitability of each product
- (2) To arrive at decision weather to sell or process further

**(3) In order to know the realizable value of each product**

**Question No: 51 ( Marks: 5 )**

The following information is available for the month of June from the Alpha department of the Greek Corporation:

	Units
Work in process June 01 (80% complete as to conversion)	40,000
Started in June	165,000
Work in process June 30 (60% complete as to conversion)	30,000

Materials are added at the beginning of the process in the Alpha department.

**Required:** Using the average cost method, what are the equivalent units of production for the month of June?

**ANSWER**

WIP OPENING	40000	
ADD UNIT STARTED	165000	
TOTAL	205000	
LESS CLOSING WIP	30000	
UNIT COMPLETED	175000	

**EQUIVALENT UNITS USING AVERAGE COST METHOD**

PARTICULARS	MATERIAL	LABOR	FOH
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COMPLETED	175000	175000	175000
CLOSING WIP	30000	30000*60% = 18000	30000*60% = 18000
<b>TOTAL</b>	<b>205000</b>	<b>193000</b>	<b>193000</b>

**Question No: 52 ( Marks: 5 )**

The Carter Manufacturing Company estimates its production requirements to be 30,000 units for October, 38,000 units for November and 41,000 units for December. It takes 3 direct labor hours at a rate of Rs. 3 per hour to complete one unit.

**Prepare direct Labor budget cost for the last quarter of the year.**

**DIRECT LABOR COST BUDGET FOR THE LAST QUARTER**

**From October to December**

<b>Particulars</b>	<b>October</b>	<b>November</b>	<b>December</b>
Units produced	30000	38000	40000
Labor hour per unit	3	3	3
Total labor hours	90000	104000	120000
Labor rate per hour	Rs.3	Rs.3	Rs.3
<b>Total labor cost</b>	<b>Rs. 270000</b>	<b>Rs.312000</b>	<b>Rs.360000</b>

**Question No: 53 ( Marks: 10 )**

**Consider the following data:**

Sales	Rs.100 Per unit
Material	Rs.10 Per unit
Labor	Rs.10 Per unit
FOH	Rs.5 Per unit
Fixed FOH	Rs. 50,00,000
Units produced & sold	1,00,000 units

**Required:**

- Income statement under variable costing

- Break Even point in rupees
- Margin of safety ratio at the given sales level
- MOS

**Solution A)**

<b>Sales (100000*100)</b>	<b>10,000,000</b>
<b>Less variable cost of goods sold</b>	
<b>Material (100000*10)</b>	<b>1,000,000</b>
<b>Labor (100000*10)</b>	<b>1,000,000</b>
<b>Variable FOH(100000*5)</b>	<b>500,000</b>
	<hr/>
<b>total variable cost</b>	<b>( 2500000)</b>
<b>CM</b>	<b>7500000</b>
<b>LESS FIXED OVERHEAD</b>	<b>(50,00,000)</b>
<b>PROFIT</b>	<b>2,500,000</b>

(B)

**BE in Rs = fixed cost /(Contribution margin /Sales)**

$$50,00,000/(75/100) = 6,666,667$$

C)

**MOS RATIO = PRIFIT / CM \*100**

$$= 2500000 / 7500000*100$$

$$= 33.34\%$$

**D)**

**MOS = Actual sales – BE sales**

$$= 10,000,000 - 6,666,667 = 3,333,333$$

**Question No: 54 ( Marks: 10 )**

Ahmed manufacturing company's projected sales of Rs. 850,000 for the next year. The budgeted data proposed by Cost Accountants are as follows:

Material:	Rs. 115,000
Labor:	95,000
FOH:	65,000

The company's opening finished goods inventory are Rs. 35,000 and ending finished goods inventory are Rs. 55,000. The fixed portion of administrative and selling expenses is estimated as 7% and 12% of sales respectively and variable portion of administrative and selling expenses is estimated as 6% and 14% of sales respectively.

The financial charges are estimated Rs. 5,500 and the tax rate is 30%.

**Required:** Prepare the projected income statement for the period?

<b>SALES</b>		<b>850,000</b>
<b>LESS COST OF GOODS SOLD</b>		
MATERIAL	115000	
LABOR	95000	
FOH	65000	
	<hr/>	
TOTLA FACTORY COST	275000	
ADD OPENING FINISHED GOODS	35000	
	<hr/>	
COST OF GOODS TO BE SOLD	310000	

LESS ENING FINISHED GOODS	55000	
<b>COST OF GOODS SOLD</b>		<b>255000</b>
<b>GROSS PROFIT</b>		<b>595000</b>
LESS ADMIN AND SELLING EXP FIXED		
ADMIN	59500	
SELLING	102000	
LESS ADMIN AND SELLING EXP VARIABLE		
ADMIN	51000	
SELLING	119000	
		<b>331500</b>
<b>EBIT</b>		<b>263500</b>
LESS FINANCILA CHARGES		5500
<b>EBT</b>		<b>258000</b>
LESS TAX 30%		77400
<b>EAT</b>		<b>180600</b>

**Question No: 41 ( Marks: 5 )**

Bouch Company has the following data of year 02 given below

Year 02

Sales	Rs. 120/unit
Direct Materials	Rs. 8/unit
Direct labor	Rs. 10/unit
Variable overhead	Rs. 7/unit
Selling & Admin expenses	Rs. 2/unit
Fixed overhead	Rs. 7,500

Normal volume of production 250 units per year

Information regarding units as follows





LESS ADMIN AND SELLING

500

PROFIT

21250

**Question No: 42 ( Marks: 5 )**

A Company manufactures two products A and B. Forecasts for first 7 months is as under:

Month	Sales in Units	
	A	B
January	1,000	2,800
February	1,200	2,800
March	1,610	2,400
April	2,000	2,000
May	2,400	1,600
June	2,400	1,600
July	2,000	1,800

No work in process inventory has been estimated in any month however finished goods inventory shall be on hand equal to half the sales to the next month, in each month. This is constant practice.

Budgeted production and production costs for the year 1999 will be as follows:

Production units	22,500	24,000
Direct Materials (per unit)	12.5	19
Direct Labor (per unit)	4.5	7
F.O.H. (apportioned)	Rs. 66,000	Rs 96,000

Prepare for the six months period ending June 1999, a production budget for **“Product A”**

**Production budget**  
**For the year ended -----**

Particular	January	February	March	April	May	June
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Unit required to meet sale budget	1000	1200	1610	2000	2400	2400
Add desired ending inv	600	805	1000	1200	1200	1000
<b>Total unit required</b>	<b>1600</b>	<b>2005</b>	<b>2610</b>	<b>3200</b>	<b>3600</b>	<b>3400</b>
Less opening inventory	----	600	805	1000	1200	1200
<b>Planned production for the year</b>	<b>1600</b>	<b>1405</b>	<b>1805</b>	<b>2200</b>	<b>2400</b>	<b>2200</b>

**Question No: 43 ( Marks: 10 )**

The managing director of Parser Limited, a small business, is considering undertaking a one-off contract. She has asked her inexperienced accountant to advise on what costs are likely to be incurred so that she can price at a profit. The following schedule has been prepared:

Costs for special order	Notes	Rs.
Direct wages	1	28,500
Supervisor costs	2	11,500
General overheads	3	4,000
Machine depreciation	4	2,300
Machine overheads	5	18,000
Materials	6	34,000
<b>Total</b>		<b>98,300</b>

**Notes**

v Direct wages comprise the wages of two employees, particularly skilled in the labor process for this job. They could be transferred from another department to undertake the work on the special order. They are fully occupied in their usual department and sub-contracting staff would have to be brought in to undertake the work left behind.

v Sub-contracting costs would be Rs. 32,000 for the period of the work. Other sub-contractors who are skilled in the special order techniques are also available to work on the special order. The costs associated with this would amount to Rs. 31,300.

v A supervisor would have to work on the special order. The cost of Rs. 11,500 is made up of Rs. 8,000 normal payments plus a Rs. 3,500 additional bonus for working on the special order. Normal payments refer to the fixed salary of the supervisor. In addition, the supervisor would lose incentive payments in his normal work amounting to Rs. 2,500. It is not anticipated that any replacement costs relating to the supervisors' work on other jobs would arise.

v General overheads comprise an apportionment of Rs. 3,000 plus an estimate of Rs. 1,000 incremental overheads.

### Required

Produce a revised costing schedule for the special project based on relevant costing principles. Fully explain and justify each of the costs included in the costing schedule.

### Question No: 44 ( Marks: 10 )

Due to the declining popularity of digital watches, Swiss Company's digital watch line has not reported a profit for several years. An income statement for last year follows:

Segment Income Statement—Digital Watches		
	Rs.	Rs.
Sales.....		500,000
Less variable expenses:		
Variable manufacturing costs.....	120,000	
Variable shipping costs.....	5,000	
Commissions.....	<u>75,000</u>	<u>200,000</u>
Contribution margin.....		300,000
Less fixed expenses:		
General factory	60,000	

overhead(1).....		
Salary of product line manager.....	90,000	
Depreciation of equipment (2).....	50,000	
Product line advertising.....	100,000	
Rent—factory space (3).....	70,000	
General administrative expense (1).....	<u>30,000</u>	<u>400,000</u>
Net operating loss.....		<u>(100,000)</u>

- 1) Allocated common costs that would be redistributed to other product lines if digital watches were dropped
- 2) This equipment has no resale value and does not wear out through use
- 3) The digital watches are manufactured in their own facility

Should the company retain or drop the digital watch line?

**Question No: 45 ( Marks: 10 )**

Production component	Rates	Per unit Rate
Direct material	2.5 lbs @ Rs. 4.00	Rs. 10.00
Direct Labor	.5 hr @ Rs. 16.00	Rs. 8.00
VOH	.5 hr @ Rs. 4.00	Rs. 2.00
Fixed FOH	Rs. 40,000	Rs. 2.50
Actual Output	16,000 units	
Variable S&A	Rs. 6.00 per unit	
Fixed S&A	Rs. 60,000	

Selling price	Rs. 40	
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Assume sales of 12,000 units.

**Required:** What is the profit under marginal and absorption

**Question No: 49 ( Marks: 3 )**

The Superior Company manufactures paint and uses a process costing system. During February, Superior started 80,000 gallons of paint. During the month the company completed 92,000 gallons and transferred them to the mixing department. Superior had 38,000 gallons in beginning inventory and 26,000 gallons in ending inventory. Material is added at the beginning of the process and conversion costs are added evenly throughout the process. Beginning WIP was 30% complete as to conversion costs and ending WIP was 20% complete as to conversion costs. The company uses a FIFO costing. The cost data for February follow:

**Beginning inventory:**

Direct materials Rs.22, 200

Conversion costs Rs. 44,000

**Costs added this period:**

Direct materials Rs. 150,000

Conversion costs Rs. 343,200

**Required:**

How many gallons were started and completed this period?

**Answer :**

**GALLONS STARTED AND COMPLETED THIS PERIOD**

	<b>MATERIAL</b>	<b>LABOR</b>	<b>OVERHEAD</b>
OP INVENTORY	-----	26600	26600
ADD STARTED	80000	80000	80000
<b>started this period</b>	<b>80000</b>	<b>106600</b>	<b>106600</b>
transferred out	92000	92000	92000
ending inventory	26000	5200	5200
<b>completed</b>	<b>118000</b>	<b>97200</b>	<b>97200</b>

this period

**Question No: 50 ( Marks: 3 )**

Product "A" has a contribution of Rs. 8 per unit; a contribution margin ratio is 50% and requires 4 machine hours to produce. Product "B" has a contribution of Rs. 12 per unit; a contribution margin ratio is 40% and requires 5 machine hours to produce. If the constraint is machine hours to produce, then which one of the both product a company should produce and sell? Support your answer with suitable workings.

Answer :

**WORKING**

As the limiting factor in above case is the machine hours so we will go with that option which gives the maximum contribution margin per machine hour.

	PRODUCT A	PRODUCT B
Contribution Margin/Unit	8	12
Machine hour required per unit	4	5
Contribution per machine hour	2 Rs	2.4 Rs

Product B should be made by the company and sold instead of A.

**Question No: 51 ( Marks: 5 )**

Liberty Pizzas delivers to the housing societies near Gulberg. The company's annual fixed costs are Rs 400,000. The sales price of a normal size pizza is Rs 100 and it costs the company Rs 60 to make and deliver each pizza.

**Required:**

- 1- Calculate the Break even sales in Rs and in Units.
- 2- How many Pizzas must the company sell to earn a profit of Rs.650,000

**Answer :**

- 1- Calculate the Break even sales in Rs and in Units.

**Answer :**

Sale price per unit = Rs 100  
Variable cost per unit = Rs 60  
Fixed Cost = Rs. 400,000

**Contribution margin per unit = Sale price per unit– Variable Cost per unit**  
**Contribution margin per unit        =                100        -                60**  
**=                40**

So contribution margin to sales ratio is  
 $C/S = (40/100) \times 100 = 40\%$

**Break even sales in rupees = Fixed Cost/contribution margin ratio**

Break even sales in rupees =  $400,000 / .40$   
**Break even sales in rupees = 10,00,000 Rs**

**Break even sales in units = fixed cost / CM per unit**

Break even sales in units =  $400000 / 40$   
**Break even sales in units = 10,000 units (10 thousand units)**

**2- How many Pizzas must the company sell to earn a profit of Rs.650,000**

**Answer :**

**Required profit = Rs 650,000**  
**TARGET contribution margin = Required profit + Fixed cost**  
**TRAGET contribution margin = 650,000 + 400,000**  
**= Rs. 1,050,000**

**Contribution margin per unit = 100 – 60 = 40 Rs.**

numbers of pizzas to produce to earn a profit =  $TRAGET\ CM / CM\ PER\ UNIT$   
 $= Rs\ 650,000 = 1,050,000 / 40$   
**Numbers of pizzas to produce to earn a profit of Rs 650,000 = 26,250 pizzas**

**Question No: 52 ( Marks: 5 )**

Classify the following expenses as **Financial or Administrative expense** by filling the appropriate boxes?

Expenses	Nature of expense
Salaries of employee	<b>Administrative Expense</b>
Interest paid on debts	<b>Financial Expense</b>
Utility Bills	<b>Administrative Expense</b>
Depreciation of office equipment	<b>Administrative Expense</b>
Interest paid on debentures	<b>Financial Expense</b>

**Question No: 53 ( Marks: 10 )**

The following is the Corporation's Income Statement for last month:

Particulars	Rs.
Sales	4,000,000
Less: variable expenses	1,800,000
Contribution margin	2,200,000
Less: fixed expenses	720,000
Net income	1480,000

The company has no beginning or ending inventories. A total of 80,000 units were produced and sold last month.

**Required:**

- 3- What is the company's contribution margin ratio?
- 4- What is the company's break-even in units?
- 5- How many units would the company have to sell to attain a target profit of Rs. 820,000?

Answer :

- 1- What is the company's contribution margin ratio?

Answer :

**Contribution margin ratio = (Contribution margin / Sales ) X 100**

**Contribution margin ratio = (2,200,000/4,000,000)X 100**

**Contribution margin ratio = 55 %**

- 2- What is the company's break-even in units?

Answer :



Fixed Cost = Rs 720,000  
Contribution margin = Rs 2,200,000  
Number of units produced and sold = 80,000

**Contribution margin per unit =  $2,200,000 / 80,000 = \text{Rs } 27.5$**

**Break even point in Units = Fixed Cost/ Contribution margin per unit**

**Break even point in Units =  $720,000 / 27.5$**

**Break even point in Units = 26181.82 or approximately 26,182 units**

3- How many units would the company have to sell to attain a target profit of Rs. 820,000?

Answer :

We know that

**Contribution margin per unit = Total Contribution margin/ Total units sold**

Contribution margin per unit =  $2,200,000 / 80,000 = 27.5 \text{ Rs}$

So target profit = 820,000

**Target contribution margin in Rs =  $820,000 + 720,000$  (fixed cost)**

Target contribution margin in Rs = 1,540,000

**No. of units = Target contribution margin in rupees/Contribution margin per unit**

No of Units to produce =  $1,540,000 / 27.5 = 56,000 \text{ units}$

So to attain a target profit of Rs 820,000 total units that should be produced are 56,000 units

**Question No: 54 ( Marks: 10 )**

The manufacturing Company estimates its factory overhead to be as follows:

<b>Fixed expense per month</b>	<b>Rs.</b>	<b>Variable rate (Rs.) per direct labor hour</b>
Indirect material	2,000	
Indirect Labor	900	0.2
Maintenance	1200	0.3
Heat and Light	300	
Power	200	0.55
Insurance	270	
Taxes	600	
Payroll Taxes	0	0.10
Depreciation	1,350	

Assuming that the direct labor hours for January, February and March are 2,640, 4,740 and 2,370 hours respectively.

**Required:**

Prepare factory overhead budget for the first quarter.

**FACTORY OVERHEAD BUDGET FOR THE Fourth QUARTER**

<b>PARTICULAR</b>	<b>JANUARY</b>	<b>FEBRURAY</b>	<b>MARCH</b>
Indirect material	2000	2000	2000
Indirect labor			
Fixed	372		426
Variable	528	900	474
Maintenance			
Fixed	408		489
Variable	792	1200	711
Heat and light	300	300	300
Power			
Fixed			
Variable	200	200	200
Insurance	270	270	270
Taxes	250	250	250
Payroll			
Variable	264	474	237
Fixed			
Depreciation	1350	1350	1350
<b>TOTAL OVERHEAD</b>	<b>6371</b>	<b>6944</b>	<b>6707</b>

**Question No: 49 ( Marks: 3 )**

Break even chart is the useful technique for showing relationship between costs, volume and profits. Identify the components of break even chart.

- (1) total cost
- (2) sales revenue
- (3) fixed cost
- (4) variable cost

**Question No: 50 ( Marks: 3 )**

Briefly describes the importance of material budget.

Production planning department plans for quantity and type of material required and make request to purchase department on receipt of request purchase department arranges for funds to purchase material as and when required i.e. Jit , just in time inventory so as to avoid over stocking as well as out of stock hence , material budget is important to avoid carrying and holding cost and keeping the funds available for making payment to suppliers

**Question No: 51 ( Marks: 5 )**

Garrett Company sells hand-crafted furniture. One item it sells is a small table that sells for Rs. 30 per unit. The variable costs related to the table, including product and shipping costs, are Rs. 18 per unit. Total fixed costs for the company are Rs. 60,000. Assume the tables are the only product the company sells this year and **draw a CVP graph** to represent the company's sales and expenses. From this graph, compute the approximate breakeven point in rupees and units.

$$\text{CM PER UNIT} = \text{SALES PRICE PER UNIT} - \text{VARIABLE COST PER UNIT}$$

$$= 30 - 18$$

$$= 12 \text{ PER UNIT}$$

$$\text{BE POINT IN UNITS} = \text{FIXED COST} / \text{CM PER UNIT}$$

$$= 60000 / 12$$

$$= 5000$$

$$\text{BE SALES (5000 *30)} \quad \quad \quad \mathbf{150000}$$

**PROOF**

$$\text{BE SALES (5000 *30)} \quad \quad \quad 150000$$

$$\text{VARIABLE COST} \quad \quad \quad 90000$$

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$$\text{CM} \quad \quad \quad 60000$$

$$\text{CM RATIO} = 60000 / 150000 = 40\%$$

$$\text{BE SALES IN Rs.} = 60000 / .40$$

$$= 150000$$

**Question No: 52 ( Marks: 5 )**

A textile company anticipates the following unit sales during the four months of 2008.

Months	April	May	June	July
Sales units	20,000	30,000	25,000	40,000

The company maintains its ending finished goods inventory at 60% of the following month's sale. The April 1st, finished goods inventory will be 12,000 units.

**Required:** Prepare a production budget for second quarter of year.

**PRODUCTION BUDGET**

Months	April	May	June
Sales units	20,000	30,000	25,000
Add	18000	15000	24000
Ending Inventory			
Total	38000	45000	49000
Less op inv	12000	18000	15000
Production	26000	27000	34000

**Question No: 53 ( Marks: 10 )**

The Midnight Corporation budget department gathered the following data for the third quarter:

	July	August	September
Projected Sales (units)	1,000	1,500	1,450

Selling price per unit (Rs.)	40	40	40
Direct material purchase requirement (units)	1,300	2,000	1,800
Purchase cost per unit material (Rs.)	20	20	20
Production units required to calculate labor cost	800	1,300	1100

### **Additional information**

Direct labor hours	2 per complete unit
Direct Labor rate	Rs. 2 per direct labor hour
Fixed factory overhead	Rs. 500 per month including Rs. 200 depreciation
Variable factory overhead	Rs. 1.50 per direct labor hour
Selling and Admin expense	5% of sales

### **Net Income before tax is as follows:**

Months	Rs.
July	6,000
August	10,000
September	8,000

All sales and purchases are for cash and all expenses are paid in the month incurred. Assuming that the opening cash balance on July 1<sup>st</sup> is Rs. 25,000 and tax rate is 40%,

**Required:** Prepare cash budget for third quarter.

### **CASH RECEIPTS**

Particulars	July	August	September
Opening balance	25000	34700	48300
Sales	40000	60000	58000

Ni After Tax	3600	6000	4800
<b>TOTAL RECEIPTS</b>	<b>68600</b>	<b>100700</b>	<b>111100</b>
<b>CASH PAYMENYTS</b>			
Direct material	26000	40000	36000
Direct Labor	3200	5200	4400
Fixed FOH	300	300	300
Variable foh	2400	3900	3300
Sel And Admin	2000	3000	2900
<b>TOTAL PAY</b>	<b>33900</b>	<b>52400</b>	<b>46900</b>
<b>CLOSING BALANCE</b>	<b>34700</b>	<b>48300</b>	<b>64200</b>

**Question No: 54 ( Marks: 10 )**

ABC company is currently deciding whether to undertake a new contract of 20 hours of labor will be required for the contract. The company currently producing product S the standard cost details of which are given below:

**Standard Cost Card**

**Product S**

	Rs/unit
Direct Material	200
Direct Labor	300
FIXED FOH	500
Selling Price	700
Contribution margin	200

**Requirement:**

1. What is the relevant cost of labor if the labor must be hired from outside the organization? **(300\*20)=6000**

2. What is the relevant cost of labor if the company expects to have 5 hours spare capacity? (  $15 \times 300$  ) =4500

3. What is the relevant cost of labor if the labor is in a short supply  
 $300 \times 5 = 1500$

**Question No: 49 ( Marks: 3 )**

Define contribution margin?

**Contribution margin per unit** means **selling price per unit less variable cost per unit**

**Total contribution margin** means **volume \* (selling price per unit less variable cost per unit)**

**Target contribution margin**

**Fixed cost + target profit**

**Question No: 50 ( Marks: 3 )**

**What is a principle budget factor?**

Some factor like labor or material which are short in supply. This may be due to shortage of material, labor hours, machine capacity and shortage of funds. That factor which ultimately decides the planned activity level.

For example a company wants to produce 100,000 pieces of computer but available skilled labor can produce only 80,000 units.

Hence, labor is principle budget factor in this case.

**Question No: 51 ( Marks: 5 )**

Ali Company produces and sells Amrat Cola to retailers. The Cola is bottled in 2-litter plastic bottles. The estimated budgeted sales for the year 2009 would be Rs. 360,000 and the estimated Profit for the year 2009 would be Rs 10,000.

The Margin of safety Ratio is calculated as 20%.

**Required:** Breakeven Sales for the year 2009

**PROFIT / MOS RATIO = CONTRIBUTION MARGIN**

$$10000 / .2 = 50,000$$

**C/S RATIO = CM /SALES \*100**

$$= 50000 / 360000 * 100$$

$$= 13.88\%$$

**(IN CASE OF BREAK EVEN SALES = CONTRIBUTION MARGIN EQUAL TO FIXED COST)**

**BE SALES = FIXED COST /C/S RATIO**

$$= 40000 / 13.8889$$

$$287,999$$

**OR**

**MOS RATIO = MOS / BUDGETED SALES**

**MOS = BUDGETED SALES \* MOS RATIO**

$$MOS = 360,000 * 20\% = 72,000$$



**MOS = budgeted sales – break even sales**

**Break even sales = Budgeted sales – MOS**

**= 360,000 – 72,000 = 288,000**

**Question No: 52 ( Marks: 5 )**

The management of Franco Corporation is concerned about department B, which showed a loss of Rs. 1,300 last quarter. You have been asked to prepare an analysis that will help management to decide whether to discontinue the department. Below is the Franco's Income Statement for last quarter:

	Department A	Department B	Total
Sales (Rs)	260,000	130000	390,000
Variable Cost (Rs)	156,000	117000	273,000
<b>Contribution margin</b>	<b>104,000</b>	<b>13,000</b>	<b>117,000</b>
Less: Fixed Costs:			
Separable (Rs)	11,300	5700	17,000
Joint (Rs)	17,400	8600	26,000
Total	28,700	14300	43,000
<b>Profit (Loss) (Rs)</b>	<b>75,300</b>	<b>(1,300)</b>	<b>74,000</b>

Showing all calculations, determine the effect of closing department B on Franco Corporation and make a recommendation.

**ANALYSIS**

**If we discontinue the department “b” than the loss will be as follows**

**13,000 +1,300 = 14,300**

**Department “b” must be continued because fixed cost equal to Rs.13, 000 is being covered and loss is only rs.1300 other wise if we discontinue the loss will be equal to Rs.14, 300**

**Question No: 53 ( Marks: 10 )**

Classify following organization with respect to cost accumulation procedure generally used either Job order costing or Process costing by filling the appropriate boxes given below.

**ANSWER**

<b>Industries</b>	<b>Costing Procedure to be applied</b>
Paint	<b>Process Costing</b>
Leather	<b>Process Costing</b>
Printing press	<b>Job Order</b>
Wood furniture	<b>Job Order</b>
Steel	<b>Process Costing</b>
Jewelry items	<b>Job Order</b>
Accounting firms	<b>Job Order</b>
Mobile phones	<b>Process costing</b>
Tires and tubes	<b>Process Costing</b>
Sugar	<b>Process Costing</b>

**Question No: 54 ( Marks: 10 )**

Ali and Co. has sales of Rs. 50,000 in March and Rs. 60,000 in April. Forecasted sales for May, June and July are Rs. 70,000, Rs. 80,000 and 100,000 respectively. The firm has a cash balance of Rs. 5,000 on May 01 and wishes to maintain a minimum cash balance of Rs. 5,000. Given the following data, prepare a cash budget for the month of May, June and July.

1. The firm makes 20% of sales for cash, 60% are collected in the next month and the remaining 20% are collected in the second month following the sale.
2. The firm receives other income of Rs. 2,000 per month.
3. The firm's actual or expected purchases, all made for cash, are Rs. 50,000, Rs. 70,000 and Rs. 80,000 for the months of May through July, respectively.
4. Rent is Rs. 3,000 per month.
5. Wages and salaries are 10% of the previous month's sales.
6. Cash dividends of Rs. 3,000 will be paid in June.
7. Payment of principal and interest of Rs. 4,000 is due in June.
8. A cash purchase of equipment costing Rs. 6,000 is scheduled in July.

9. Taxes of Rs. 6,000 are due in June.

**SALES BUDGET FOR THE QUARTER FROM MAY TO JULY**

**CASH RECEIPTS**

<b><u>PARTICULARS</u></b>	<b><u>MAY</u></b>	<b><u>JUNE</u></b>	<b><u>JULY</u></b>
	<b><u>(Rs.)</u></b>	<b><u>(Rs.)</u></b>	<b><u>(Rs.)</u></b>
<b>OPENING BALANCE of cash</b>	<b>5000</b>	<b>5000</b>	<b>-16000</b>
Receipts from sales			
March 50,000	<b>10,000</b>	<b>—</b>	<b>—</b>
April 60,000	<b>36,000</b>	<b>12,000</b>	<b>—</b>
May 70,000	<b>14,000</b>	<b>42,000</b>	<b>14,000</b>
June 80,000	<b>—</b>	<b>16,000</b>	<b>48,000</b>
July 100,000	<b>—</b>	<b>—</b>	<b>20,000</b>
Other receipts	<b>2000</b>	<b>2000</b>	<b>2000</b>
<b>TOTAL RECEIPTS</b>	<b>62,000</b>	<b>77,000</b>	<b>68,000</b>

**CASH PAYMENTS**

<b>CASH PURCHASES</b>	<b>50000</b>	<b>70000</b>	<b>80000</b>
<b>RENT</b>	<b>3000</b>	<b>3000</b>	<b>3000</b>
<b>WAGES AND SALERIES</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>
<b>CASH DIVIDEND</b>	<b>----</b>	<b>3000</b>	<b>-----</b>
<b>PAYMENT OF INTEREST</b>	<b>----</b>	<b>4000</b>	<b>-----</b>
<b>EQUIPMENT</b>	<b>-----</b>	<b>-----</b>	<b>6000</b>
<b>TAX</b>	<b>----</b>	<b>6000</b>	<b>----</b>
<b>TOTAL PAYMENTS</b>	<b>59000</b>	<b>93000</b>	<b>97000</b>
<b>TR – TP</b>	<b>3000</b>	<b>-16000</b>	<b>-29000</b>
<b>BANK LOAN</b>	<b>2000</b>		

<b>CLOSING BALANCE</b>	<b>5000</b>	<b>-16000</b>	<b>-29000</b>
----------------------------	-------------	---------------	---------------

Cash budget for the month of May

Opening balance of cash	Rs. 5,000
Add: receipts	62000
 Total amount of cash	 67000
Less: payments	(59000)
Closing balance of cash	8000

Receipts = cash sales+ Previous month sales + Previous last 2 months sales + receives other income

$$= 14000 + 36000 + 10000 + 2000 = 62000$$

$$\text{Rs. } 70000 \times 20\% = 14000$$

$$\text{Previous month sales} = 60000 \times 60/100 = 36000$$

$$\text{Previous last 2 months sales} = 50000 \times 20/100 = 10000$$

1. Payments = purchases + Rent + Wages and salaries 10% of the previous month's sales

$$= 50000 + 3,000 + 10\% \times 60000 = 59000$$

Cash budget for the month of June

Cash budget for the month of May

Opening balance of cash	Rs. 5,000
Add: receipts	76000
 Total amount of cash	 81000
Less: payments	(90000)
Closing balance of cash	(9000)

Receipts = cash sales+ Previous month sales + Previous last 2 months sales + receives other income

$$= 14000 + 48000 + 12000 + 2000 = 76000$$

$$= 70000 * 20 / 100 = 14000$$

$$\text{Previous month sales} = 80000 * 60 / 100 = 48000$$

$$\text{Previous last 2 months sales} = 60000 * 20 / 100 = 12000$$

2. Payments = purchases + Rent + Wages and salaries 10% of the previous month's sales + Payment of principal and interest + Taxes

$$70000 + 3000 + 7000 + 4000 + 6000 = 90000$$

Cash budget for the month of July

Opening balance of cash	Rs. 5,000
Add: receipts	92000
Total amount of cash	97000
Less: payments	(97000)
Closing balance of cash	0

Receipts = cash sales+ Previous month sales + Previous last 2 months sales + receives other income

$$= 60000 + 14000 + 16000 + 2000 = 92000$$

$$100000 * 60/100 = 60000$$

$$70000 * 20/100 = 14000$$

$$80000 * 20/100 = 16000$$

Payments = purchases + Rent + Wages and salaries 10% of the previous month's sales + cash purchase of equipment

$$= 80000 + 3000 + 8000 + 6000 = 97000$$

**Question No: 40 ( Marks: 1 ) - Please choose one**

**The managers of a firm are in the process of deciding whether to accept or reject a special offer for one of its products. A cost that is not relevant to their decision is the:**

Variable overheads

Common fixed overhead that will continue if the special offer is not accepted

Direct materials

Fixed overhead that will be avoided if the special offer is accepted

**Question No: 41 ( Marks: 5 )**

Basit Ali Company produces and sells Makka Cola to retailers. The Cola is bottled in 2-liter plastic bottles. The estimated budgeted sales for the year 2008 would be Rs. 80,000 and the estimated Profit for the year 2008 would be Rs. 4,060. The Margin of safety Ratio is calculated as 25%.

Required:

1- Breakeven Sales for the year 2008

2- Projected Income statement for the year 2008

#### **SOLUTION**

$$CM = 4060 / .25$$

$$= 16240$$

$$C/S \text{ RATIO} = CM / SALES * 100$$

$$= 16240 / 80000 * 100$$

$$= 20.3$$

$$CM - PROFIT = FIXED COST$$

$$16240 - 4060 = 12180$$

$$BE \text{ SALE} = FIXED COST / C/S \text{ RATIO}$$

$$= 12180 / .203$$

$$= 60000$$

#### **B) PROJECTED INCOME STATEMENT**

SALES	80000
-VARIABLE COST	63760
CM	16240
FIXED COST	12180
PROFIT	4060
	-

Question No: 42 ( Marks: 5 )

A textile company anticipates the following unit sales during the four months of 2008.

Months April May June July Sales units 20,000 30,000 25,000 40,000

The company maintains its ending finished goods inventory at 60% of the following month's sale. The April 1st, finished goods inventory will be 12,000 units.

Required: Prepare a production budget for second quarter of year.

PARTICULARS	APRIL	MAY	JUNE
SALES	20000	30000	25000
ADD ENDING	18000	15000	24000

INV			
TOTAL AVAIABLE	38000	45000	49000
LESS OP INV	12000	18000	15000
REQUIRED PRODUCTION	26000	27000	39000

Question No: 43 ( Marks: 10 )

Following data relates to XYZ Company for the month of March:

Cost from preceding department (Rs.)

	(Rs.)	Labor	FOH
(Rs.)			
Work in process (opening)	14,400	900	550
Cost during month	126,000	33,140	19,430

Information regarding production

Units in process opening (1/4 lab & FOH) 4,000

Units in process ending inventory (1/3 lab & FOH) 3,000

Units transferred to Finished Goods 36,000

Units received from preceding department 36,000

Required:

A Cost of Production Report under Average costing method

Question No: 44 ( Marks: 10 )

80 units of product Milk chocolate are sold for Rs. 110 per unit. Variable cost is Rs. 80 per unit and fixed cost is Rs.2, 000. Johan is the brand manager in this company and purposed a new plan to management that increases their sale price, which lead to increases in net profit. Management decides to increase its sales price by 10%. With this effect quantity of sale units were decreased by 5%. Other things remains same.

Now you are the managerial accountant of the company guide them by using decision making tool (Contribution Margin Approach).

Required: Calculate the net profit with new and existing plan either increases the sale price or not state your comments.

Question No: 45 ( Marks: 10 )

Swisher company produces and sells commercial printing press.

According to the records of the past four years reveals the following:



**Sales in units:**

**Press**

**Model**

**Year 1 Year 2 Year 3 Year 4**

**222 100 110 120 130**

**333 100 120 160 240**

**444 100 95 85 70**

**The trends over past four years are expected to extend to year 5. Inventory estimates for year 5 are:**

**Press**

**Model**

**Beginning**

**Inventory**

**Ending**

**Inventory**

**222 2 4**

**333 5 5**

**444 4 5**

**Required: Prepare sales and production estimates for year 5 in units and by product wise.**

**Question No: 41 ( Marks: 5 )**

The following information is available for the month of June from the Alpha department of the Greek Corporation:

**Units**

Work in process June 01 (80% complete as to conversion) 40,000

Started in June 165,000

Work in process June 30 (60% complete as to conversion) 30,000

Materials are added at the beginning of the process in the Alpha department.

**Required:** Using the average cost method, what are the equivalent units of production for the month of June?

**Question No: 42 ( Marks: 5 )**

A Company manufactures two products A and B. Forecasts for first 7 months is as under:

**Month Sales in Units**

**A B**

**January**

**1,000 2,800**

**February 1,200 2,800**

**March**

**1,610 2,400**

**April**

**2,000 2,000**

**May**

**2,400 1,600**

June

2,400 1,600

July 2,000 1,800

No work in process inventory has been estimated in any month however finished goods inventory shall be on hand equal to half the sales to the next month, in each month. This is constant practice.

Budgeted production and production costs for the year 1999 will be as follows:

Production units 22,500 24,000

Direct Materials (per unit) 12.5 19

Direct Labor (per unit) 4.5 7

F.O.H. (apportioned) Rs. 66,000 Rs 96,000

Prepare for the six months period ending June 1999, a production budget for

**Product B**

**Question No: 43 ( Marks: 10 )**

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**Production**

**component**

**Rates Per unit**

**Rate**

Direct material 2.5 lbs @ Rs. 4.00 Rs. 10.00

Direct Labor .5 hr @ Rs. 16.00 Rs. 8.00

VOH .5 hr @ Rs. 4.00 Rs. 2.00

Fixed FOH Rs. 40,000 Rs. 2.50

Actual Output 16,000 units

Variable S&A Rs. 6.00 per unit

Fixed S&A Rs. 60,000

Selling price Rs. 40

Assume sales of 12,000 units.

**Required:** What is the profit under marginal and absorption costing method?

**Question No: 44 ( Marks: 10 )**

The manufacturing Company estimates its factory overhead to be as follows:

**Fixed expense per month Rs.**

**Variable rate (Rs.)**

**per direct labor**

**hour**

Indirect material 2,000

Indirect Labor 900 0.2

maintenance 1200 0.3

Heat and Light 300

Power 200 0.55

Insurance 270

Taxes 600

Payroll Taxes 0 0.10

Depreciation 1,350

Assuming that the direct labor hours for January, February and March are 2,640, 4,740 and 2,370 hours respectively.

**Required:**

Prepare factory overhead budget for the first quarter.

**Question No: 45 ( Marks: 10 )**

Lavender Company produces 2,000 parts per year, which are used in the assembly of one of its products. The unit product cost of these parts is:

Variable manufacturing cost Rs. 64

Fixed manufacturing cost Rs. 36

Unit product cost Rs. 100

The part can be purchased from an outside supplier at Rs. 80 per unit. If the part is purchased from the outside supplier, two-thirds of the fixed manufacturing costs can be eliminated.

What costs are irrelevant to this decision?

What would the annual impact on the company's net operating income be as a result of buying the part from the outside supplier?

**Question No: 1 ( Marks: 5 )**

Bouch Company has the following data of year 02 given below

Year 02

Sales	Rs. 120/unit
Direct Materials	Rs. 8/unit
Direct labor	Rs. 10/unit
Variable overhead	Rs. 7/unit
Selling & Admin expenses	Rs. 2/unit
Fixed overhead	Rs. 7,500

Normal volume of production 250 units per year

Information regarding units as follows

Item	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year
	units	units	units	units
Opening stock		200	300	300
Production	300	250	200	200
Sales	100	150	200	300

**Question No: 2 ( Marks: 5 )**

A Company manufactures two products A and B. Forecasts for first 7 months is as under:

Month	Sales in Units	
	A	B
January	1,000	2,800
February	1,200	2,800
March	1,610	2,400
April	2,000	2,000
May	2,400	1,600
June	2,400	1,600
July	2,000	1,800

No work in process inventory has been estimated in any month however finished goods inventory shall be on hand equal to half the sales to the next month, in each month. This is constant practice.

Budgeted production and production costs for the year 1999 will be as follows:

Production units	22,500	24,000
Direct Materials (per unit)	12.5	19
Direct Labor (per unit)	4.5	7
F.O.H. (apportioned)	Rs. 66,000	Rs 96,000

Prepare for the six months period ending June 1999, a production budget for **“Product A”**

**Production budget**  
**For the year ended -----**

Particular	January	February	March	April	May	June
Unit required to meet sale budget	1000	1200	1610	2000	2400	2400

<b>Add desired ending inv</b>	600	805	1000	1200	1200	1000
<b>Total unit required</b>	<b>1600</b>	<b>2005</b>	<b>2610</b>	<b>3200</b>	<b>3600</b>	<b>3400</b>
<b>Less opening inventory</b>	----	600	805	1000	1200	1200
<b>Planned production for the year</b>	<b>1600</b>	<b>1405</b>	<b>1805</b>	<b>2200</b>	<b>2400</b>	<b>2200</b>

**Question No: 3 ( Marks: 3 )**

The Midnight Corporation budget department gathered the following data for the third quarter:

	<b>July</b>
Projected Sales (units)	1,000
Selling price per unit (Rs.)	30
Direct material purchase requirement (units)	1,500
Purchase cost per unit (Rs.)	15
Production requirements (units)	800

Direct labor hours Rs. 1.5 per unit
Direct Labor rate Rs. 2.5 per direct labor hour
Fixed FOH is Rs. 2600, included depreciation Rs. 300
Selling and Admin expense 4% of sales

**Net Income before tax is as follows**

July	8,000
August	10,000
September	8,000

All sales and purchase are for cash and all expenses are paid in the month incurred. Assuming that the opening cash balance on July 01 is Rs. 40,000 and tax rate is 35%,

**Requirement:**

Prepare cash budget for the month of July.

**CASH BUDGET FOR THE MONTH OF JULY**

**CASH RECEIPTS**

<b>PARTICULARS</b>	<b>JULY (Rs.)</b>
<b>OPENING BALANCE</b>	<b>40000</b>
SALES	30000
NET INCOME AFTE TAX	2800
<b>TOTAL RECEIPTS</b>	<b>72800</b>
<b>CASH PAYMENTS</b>	
PURCHASES	22500
DIRECT LABOR	3000
FIXED FOH	2300
SELLING AND ADMIN EXP	1200
<b>TOTAL PAYMENTS</b>	<b>29000</b>
<b>TOTAL RECEIPTS – TOTAL PAYMENTS</b>	<b>43800</b>

**Question No: 4 ( Marks: 3 )**

Why is the selection of an appropriate cost allocation method in Joint Products important?

**ANSWER**

**The selection of an appropriate cost allocation method in joint products is important in order to know approximately exact cost of each product. Following are the factors which are more contributing to its importance**

- (4) To know the profitability of each product**
- (5) To arrive at decision weather to sell or process further**
- (6) In order to know the realizable value of each product**

**Question No: 5 ( Marks: 5 )**

The following information is available for the month of June from the Alpha department of the Greek Corporation:

	Units
Work in process June 01 (80% complete as to conversion)	40,000
Started in June	165,000
Work in process June 30 (60% complete as to conversion)	30,000

Materials are added at the beginning of the process in the Alpha department.

**Required:** Using the average cost method, what are the equivalent units of production for the month of June?

**ANSWER**

WIP OPENING	40000
ADD UNIT STARTED	165000
	<hr/>
TOTAL	205000
LESS CLOSING WIP	30000
UNIT COMPLETED	175000

**EQUIVALENT UNITS USING AVERAGE COST METHOD**

PARTICULARS	MATERIAL	LABOR	FOH
COMPLETED	175000	175000	175000
CLOSING WIP	30000	30000*60% = 18000	30000*60% = 18000
<b>TOTAL</b>	<b>205000</b>	<b>193000</b>	<b>193000</b>

**Question No: 6 ( Marks: 5 )**



The Carter Manufacturing Company estimates its production requirements to be 30,000 units for October, 38,000 units for November and 41,000 units for December. It takes 3 direct labor hours at a rate of Rs. 3 per hour to complete one unit.

**Prepare direct Labor budget cost for the last quarter of the year.**

**DIRECT LABOR COST BUDGET FOR THE LAST QUARTER**

**From October to December**

Particulars	October	November	December
Units produced	30000	38000	40000
Labor hour per unit	3	3	3
Total labor hours	90000	104000	120000
Labor rate per hour	Rs.3	Rs.3	Rs.3
<b>Total labor cost</b>	<b>Rs. 270000</b>	<b>Rs.312000</b>	<b>Rs.360000</b>

**Question No:7 ( Marks: 10 )**

**Consider the following data:**

Sales	Rs.100 Per unit
Material	Rs.10 Per unit
Labor	Rs.10 Per unit
FOH	Rs.5 Per unit
Fixed FOH	Rs. 50,00,000
Units produced & sold	1,00,000 units

**Required:**

- Income statement under variable costing
- Break Even point in rupees
- Margin of safety ratio at the given sales level
- MOS

**Solution A)**

**Sales (100000\*100)**

**10,000,000**

**Less variable cost of goods sold**

<b>Material (100000*10)</b>	<b>1,000,000</b>
<b>Labor (100000*10)</b>	<b>1,000,000</b>
<b>Variable FOH(100000*5)</b>	<b>500,000</b>

---

**total variable cost** ( 2500000)

**CM** 7500000

**LESS FIXED OVERHEAD** (50,00,000)

**PROFIT** 2,500,000

(B)

**BE in Rs = fixed cost /(Contribution margin /Sales)**

$$50,00,000/(75/100) = 6,666,667$$

C)

**MOS RATIO = PRIFIT / CM \*100**

$$= 2500000 / 7500000 * 100$$

$$= 33.34\%$$

D)

**MOS = Actual sales – BE sales**

$$= 10,000,000 - 6,666,667 = 3,333,333$$

**Question No: 8 ( Marks: 10 )**

Ahmed manufacturing company's projected sales of Rs. 850,000 for the next year. The budgeted data proposed by Cost Accountants are as follows:

Material:	Rs. 115,000
Labor:	95,000
FOH:	65,000

The company's opening finished goods inventory are Rs. 35,000 and ending finished goods inventory are Rs. 55,000. The fixed portion of administrative and selling expenses is estimated as 7% and 12% of sales respectively and variable portion of administrative and selling expenses is estimated as 6% and 14% of sales respectively.

The financial charges are estimated Rs. 5,500 and the tax rate is 30%.

**Required:** Prepare the projected income statement for the period?

<b>SALES</b>		<b>850,000</b>
<b>LESS COST OF GOODS SOLD</b>		
MATERIAL	115000	
LABOR	95000	
FOH	65000	
	<hr/>	
TOTLA FACTORY COST	275000	
ADD OPENING FINISHED GOODS	35000	
	<hr/>	
COST OF GOODS TO BE SOLD	310000	
LESS ENING FINISHED GOODS	55000	
	<hr/>	
<b>COST OF GOODS SOLD</b>		<b>255000</b>
		<hr/>
<b>GROSS PROFIT</b>		<b>595000</b>
LESS ADMIN AND SELLING EXP FIXED		
ADMIN	59500	
SELLING	102000	
LESS ADMIN AND SELLING EXP VARIABLE		

ADMIN	51000	
SELLING	119000	
	<hr/>	<b>331500</b>
<b>EBIT</b>		<hr/> <b>263500</b>
LESS FINANCILA CHARGES		5500
		<hr/>
<b>EBT</b>		<b>258000</b>
LESS TAX 30%		77400
		<hr/>
<b>EAT</b>		<b>180600</b>

**Question No: 9 ( Marks: 3 )**

Break even chart is the useful technique for showing relationship between costs, volume and profits. Identify the components of break even chart.

- (5) total cost
- (6) sales revenue
- (7) fixed cost
- (8) variable cost

**Question No: 10 ( Marks: 3 )**

Briefly describes the importance of material budget.

Production planning department plans for quantity and type of material required and make request to purchase department on receipt of request purchase department arranges for funds to purchase material as and when required i.e. Jit , just in time inventory so as to avoid over stocking as well as out of stock hence , material budget is important to avoid carrying and holding cost and keeping the funds available for making payment to suppliers

**Question No: 11 ( Marks: 5 )**

Garrett Company sells hand-crafted furniture. One item it sells is a small table that sells for Rs. 30 per unit. The variable costs related to the table, including product and shipping

costs, are Rs. 18 per unit. Total fixed costs for the company are Rs. 60,000. Assume the tables are the only product the company sells this year and **draw a CVP graph** to represent the company's sales and expenses. From this graph, compute the approximate breakeven point in rupees and units.

$$\text{CM PER UNIT} = \text{SALES PRICE PER UNIT} - \text{VARIABLE COST PER UNIT}$$

$$= 30 - 18$$

$$= 12 \text{ PER UNIT}$$

$$\text{BE POINT IN UNITS} = \text{FIXED COST} / \text{CM PER UNIT}$$

$$= 60000 / 12$$

$$= 5000$$

$$\text{BE SALES (5000 * 30)} \quad \quad \quad \mathbf{150000}$$

#### **PROOF**

$$\text{BE SALES (5000 * 30)} \quad \quad \quad 150000$$

$$\text{VARIABLE COST} \quad \quad \quad 90000$$

---


$$\text{CM} \quad \quad \quad 60000$$

$$\text{CM RATIO} = 60000 / 150000 = 40\%$$

$$\text{BE SALES IN Rs.} = 60000 / .40$$

$$= 150000$$

#### **Question No: 12 ( Marks: 5 )**

A textile company anticipates the following unit sales during the four months of 2008.

Months	April	May	June	July
Sales units	20,000	30,000	25,000	40,000

The company maintains its ending finished goods inventory at 60% of the following month's sale. The April 1st, finished goods inventory will be 12,000 units.

**Required:** Prepare a production budget for second quarter of year.

**PRODUCTION BUDGET**

Months	April	May	June
<b>Sales units</b>	20,000	30,000	25,000
<b>Add</b>	18000	15000	24000
<b>Ending Inventory</b>			
<b>Total</b>	38000	45000	49000
<b>Less op inv</b>	12000	18000	15000
<b>Production</b>	26000	27000	34000

**Question No: 13 ( Marks: 10 )**

The Midnight Corporation budget department gathered the following data for the third quarter:

	July	August	September
Projected Sales (units)	1,000	1,500	1,450
Selling price per unit (Rs.)	40	40	40
Direct material purchase requirement (units)	1,300	2,000	1,800
Purchase cost per unit material (Rs.)	20	20	20
Production units required to calculate labor cost	800	1,300	1100

**Additional information**

Direct labor hours	2 per complete unit
Direct Labor rate	Rs. 2 per direct labor hour
Fixed factory overhead	Rs. 500 per month including Rs. 200 depreciation
Variable factory overhead	Rs. 1.50 per direct labor hour
Selling and Admin expense	5% of sales

**Net Income before tax is as follows:**

Months	Rs.
July	6,000
August	10,000
September	8,000

All sales and purchases are for cash and all expenses are paid in the month incurred. Assuming that the opening cash balance on July 1<sup>st</sup> is Rs. 25,000 and tax rate is 40%,

**Required:** Prepare cash budget for third quarter.

**CASH RECEIPTS**

Particulars	July	August	September
<b>Opening balance</b>	<b>25000</b>	<b>34700</b>	<b>48300</b>
Sales	40000	60000	58000
Ni After Tax	3600	6000	4800
<b>TOTAL RECEIPTS</b>	<b>68600</b>	<b>100700</b>	<b>111100</b>
<b>CASH PAYMENYTS</b>			
Direct material	26000	40000	36000
Direct Labor	3200	5200	4400
Fixed FOH	300	300	300
Variable foh	2400	3900	3300
Sel And Admin	2000	3000	2900
<b>TOTAL PAY</b>	<b>33900</b>	<b>52400</b>	<b>46900</b>
<b>CLOSING BALANCE</b>	<b>34700</b>	<b>48300</b>	<b>64200</b>

**Question No: 14 ( Marks: 10 )**

ABC company is currently deciding whether to undertake a new contract of 20 hours of labor will be required for the contract. The company currently producing product S the standard cost details of which are given below:

**Standard Cost Card**

**Product S**

	Rs/unit
Direct Material	200
Direct Labor	300
FIXED FOH	500
Selling Price	700
Contribution margin	200

**Requirement:**

1. What is the relevant cost of labor if the labor must be hired from outside the organization?  $(300 \times 20) = 6000$
2. What is the relevant cost of labor if the company expects to have 5 hours spare capacity?  $(15 \times 300) = 4500$
3. What is the relevant cost of labor if the labor is in a short supply  $300 \times 5 = 1500$

**Question No: 15 ( Marks: 3 )**

The Superior Company manufactures paint and uses a process costing system. During February, Superior started 80,000 gallons of paint. During the month the company completed 92,000 gallons and transferred them to the mixing



department. Superior had 38,000 gallons in beginning inventory and 26,000 gallons in ending inventory. Material is added at the beginning of the process and conversion costs are added evenly throughout the process. Beginning WIP was 30% complete as to conversion costs and ending WIP was 20% complete as to conversion costs. The company uses a FIFO costing. The cost data for February follow:

**Beginning inventory:**

Direct materials Rs.22, 200

Conversion costs Rs. 44,000

**Costs added this period:**

Direct materials Rs. 150,000

Conversion costs Rs. 343,200

**Required:**

How many gallons were started and completed this period?

**Answer :**

**GALLONS STARTED AND COMPLETED THIS PERIOD**

	<b>MATERIAL</b>	<b>LABOR</b>	<b>OVERHEAD</b>
OP INVENTORY	-----	26600	26600
ADD STARTED	80000	80000	80000
<b>started this period</b>	<b>80000</b>	<b>106600</b>	<b>106600</b>
transferred out	92000	92000	92000
ending inventory	26000	5200	5200
<b>completed this period</b>	<b>118000</b>	<b>97200</b>	<b>97200</b>

**Question No: 16 ( Marks: 3 )**

Product "A" has a contribution of Rs. 8 per unit; a contribution margin ratio is 50% and requires 4 machine hours to produce. Product "B" has a contribution of Rs. 12 per unit; a contribution margin ratio is 40% and requires 5 machine hours to produce. If the constraint is machine hours to produce, then which one of the both product a company should produce and sell? Support your answer with suitable workings.

**Answer :**

**WORKING**

As the limiting factor in above case is the machine hours so we will go with that option which gives the maximum contribution margin per machine hour.

	PRODUCT A	PRODUCT B
Contribution Margin/Unit	8	12
Machine hour required per unit	4	5
Contribution per machine hour	2 Rs	2.4 Rs

Product B should be made by the company and sold instead of A.

**Question No: 17 ( Marks: 5 )**

Liberty Pizzas delivers to the housing societies near Gulberg. The company's annual fixed costs are Rs 400,000. The sales price of a normal size pizza is Rs 100 and it costs the company Rs 60 to make and deliver each pizza.

**Required:**

- 1- Calculate the Break even sales in Rs and in Units.
- 2- How many Pizzas must the company sell to earn a profit of Rs.650,000

**Answer :**

- 1- Calculate the Break even sales in Rs and in Units.

**Answer :**

Sale price per unit = Rs 100

Variable cost per unit = Rs 60

Fixed Cost = Rs. 400,000

$$\begin{aligned} \text{Contribution margin per unit} &= \text{Sale price per unit} - \text{Variable Cost per unit} \\ \text{Contribution margin per unit} &= 100 - 60 \\ &= 40 \end{aligned}$$

So contribution margin to sales ratio is  
 $C/S = (40/100) \times 100 = 40\%$

**Break even sales in rupees = Fixed Cost/contribution margin ratio**

Break even sales in rupees =  $400,000 / .40$   
**Break even sales in rupees = 10,00,000 Rs**

**Break even sales in units = fixed cost / CM per unit**

Break even sales in units =  $400000 / 40$   
**Break even sales in units = 10,000 units (10 thousand units)**

**2- How many Pizzas must the company sell to earn a profit of Rs.650,000**

**Answer :**

**Required profit = Rs 650,000**  
**TARGET contribution margin = Required profit + Fixed cost**  
**TARGET contribution margin =  $650,000 + 400,000$**   
 **$= \text{Rs. } 1,050,000$**

**Contribution margin per unit =  $100 - 60 = 40 \text{ Rs.}$**

numbers of pizzas to produce to earn a profit =  $\text{TARGET CM} / \text{CM PER UNIT}$   
 $= \text{Rs } 650,000 = 1,050,000 / 40$

**Numbers of pizzas to produce to earn a profit of Rs 650,000 = 26,250 pizzas**

**Question No: 18 ( Marks: 5 )**

Classify the following expenses as **Financial or Administrative expense** by filling the appropriate boxes?

Expenses	Nature of expense
Salaries of employee	<b>Administrative Expense</b>
Interest paid on debts	<b>Financial Expense</b>
Utility Bills	<b>Administrative Expense</b>
Depreciation of office equipment	<b>Administrative Expense</b>
Interest paid on debentures	<b>Financial Expense</b>

**Question No: 19 ( Marks: 10 )**

The following is the Corporation's Income Statement for last month:

Particulars	Rs.
Sales	4,000,000
Less: variable expenses	1,800,000
Contribution margin	2,200,000
Less: fixed expenses	720,000
Net income	1480,000

The company has no beginning or ending inventories. A total of 80,000 units were produced and sold last month.

**Required:**

- 3- What is the company's contribution margin ratio?
- 4- What is the company's break-even in units?
- 5- How many units would the company have to sell to attain a target profit of Rs. 820,000?

Answer :

- 1- What is the company's contribution margin ratio?

Answer :

**Contribution margin ratio = (Contribution margin / Sales ) X 100**

**Contribution margin ratio = (2,200,000/4,000,000)X 100**

**Contribution margin ratio = 55 %**

- 2- What is the company's break-even in units?

Answer :

Fixed Cost = Rs 720,000

Contribution margin = Rs 2,200,000

Number of units produced and sold = 80,000

**Contribution margin per unit = 2,200,000/ 80,000 = Rs 27.5**

**Break even point in Units = Fixed Cost/ Contribution margin per unit**

**Break even point in Units = 720,000/ 27,5**

**Break even point in Units = 26181.82 or approximately 26,182 units**

3- How many units would the company have to sell to attain a target profit of Rs. 820,000?

Answer :

We know that

**Contribution margin per unit = Total Contribution margin/ Total units sold**

Contribution margin per unit =  $2,200,000/80,000 = 27.5$  Rs

So target profit = 820,000

**Target contribution margin in Rs= 820,000 + 720,000 (fixed cost)**

Target contribution margin in Rs = 1,540,000

**No. of units = Target contribution margin in rupees/Contribution margin per unit**

No of Units to produce =  $1,540,000/27.5 = 56,000$  units

So to attain a target profit of Rs 820,000 total units that should be produced are 56,000 units

**Question No: 20 ( Marks: 10 )**

The manufacturing Company estimates its factory overhead to be as follows:

<b>Fixed expense per month</b>	<b>Rs.</b>	<b>Variable rate (Rs.) per direct labor hour</b>
Indirect material	2,000	
Indirect Labor	900	0.2
Maintenance	1200	0.3
Heat and Light	300	
Power	200	0.55
Insurance	270	
Taxes	600	
Payroll Taxes	0	0.10
Depreciation	1,350	

Assuming that the direct labor hours for January, February and March are 2,640, 4,740 and 2,370 hours respectively.

**Required:**

Prepare factory overhead budget for the first quarter.

**FACTORY OVERHEAD BUDGET FOR THE FORST QUARTER**

<b>PARTICULAR</b>	<b>JANUARY</b>	<b>FEBRURAY</b>	<b>MARCH</b>
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Indirect material	2000	2000	2000
Indirect labor			
Fixed	372		426
Variable	528	900	474
Maintenance			
Fixed	408		489
Variable	792	1200	711
Heat and light	300	300	300
Power			
Fixed			
Variable	200	200	200
Insurance	270	270	270
Taxes	250	250	250
Payroll			
Variable	264	474	237
Fixed			
Depreciation	1350	1350	1350
<b>TOTAL OVERHEAD</b>	<b>6371</b>	<b>6944</b>	<b>6707</b>

Question 21 : Define contribution margin?

**Contribution margin per unit** means **selling price per unit less variable cost per unit**

**Total contribution margin** means **volume \* (selling price per unit less variable cost per unit)**

**Target contribution margin**

**Fixed cost + target profit**

Question No: 22 ( Marks: 3 )

**What is a principle budget factor?**

Some factor like labor or material which are short in supply. This may be due to shortage of material, labor hours, machine capacity

and shortage of funds. That factor which ultimately decides the planned activity level.

For example a company wants to produce 100,000 pieces of computer but available skilled labor can produce only 80,000 units.

Hence, labor is principle budget factor in this case.

**Question No: 23 ( Marks: 5 )**

Ali Company produces and sells Amrat Cola to retailers. The Cola is bottled in 2-litter plastic bottles. The estimated budgeted sales for the year 2009 would be Rs. 360,000 and the estimated Profit for the year 2009 would be Rs 10,000.

The Margin of safety Ratio is calculated as 20%.

**Required:** Breakeven Sales for the year 2009

**PROFIT / MOS RATIO = CONTRIBUTION MARGIN**

$$10000 / .2 = 50,000$$

**C/S RATIO = CM /SALES \*100**

$$= 50000 / 360000*100$$

$$= 13.88\%$$

**(IN CASE OF BREAK EVEN SALES = CONTRIBUTION MARGIN EQUAL TO FIXED COST)**

**BE SALES = FIXED COST /C/S RATIO**

$$= 40000 / 13.8889$$

$$287,999$$

**OR**

**MOS RATIO = MOS / BUDGETED SALES**

**MOS = BUDGETED SALES \* MOS RATIO**

MOS = 360,000 \* 20% = 72,000

**MOS = budgeted sales – break even sales**

**Break even sales = Budgeted sales – MOS**

= 360,000 – 72,000 = 288,000

**Question No: 24 ( Marks: 5 )**

The management of Franco Corporation is concerned about department B, which showed a loss of Rs. 1,300 last quarter. You have been asked to prepare an analysis that will help management to decide whether to discontinue the department. Below is the Franco's Income Statement for last quarter:

	<b>Department A</b>	<b>Department B</b>	<b>Total</b>
Sales (Rs)	260,000	130000	390,000
Variable Cost (Rs)	156,000	117000	273,000
<b>Contribution margin</b>	<b>104,000</b>	<b>13,000</b>	<b>117,000</b>
Less: Fixed Costs:			
Separable (Rs)	11,300	5700	17,000
Joint (Rs)	17,400	8600	26,000
Total	28,700	14300	43,000
<b>Profit (Loss) (Rs)</b>	<b>75,300</b>	<b>(1,300)</b>	<b>74,000</b>

Showing all calculations, determine the effect of closing department B on Franco Corporation and make a recommendation.



### ANALYSIS

If we discontinue the department “b” then the loss will be as follows

$$13,000 + 1,300 = 14,300$$

Department “b” must be continued because fixed cost equal to Rs.13, 000 is being covered and loss is only rs.1300 other wise if we discontinue the loss will be equal to Rs.14, 300

### **Question No: 53 ( Marks: 10 )**

Classify following organization with respect to cost accumulation procedure generally used either Job order costing or Process costing by filling the appropriate boxes given below.

### ANSWER

Industries	Costing Procedure to be applied
Paint	Process Costing
Leather	Process Costing
Printing press	Job Order
Wood furniture	Job Order
Steel	Process Costing
Jewelry items	Job Order
Accounting firms	Job Order
Mobile phones	Process costing
Tires and tubes	Process Costing
Sugar	Process Costing

### **Question No: 25 ( Marks: 10 )**

Ali and Co. has sales of Rs. 50,000 in March and Rs. 60,000 in April. Forecasted sales for May, June and July are Rs. 70,000, Rs. 80,000 and 100,000 respectively. The firm has a cash balance of Rs. 5,000 on May 01 and wishes to maintain a minimum cash balance of Rs. 5,000. Given the following data, prepare a cash budget for the month of May, June and July.

1. The firm makes 20% of sales for cash, 60% are collected in the next month and the remaining 20% are collected in the second month following the sale.

2. The firm receives other income of Rs. 2,000 per month.
3. The firm's actual or expected purchases, all made for cash, are Rs. 50,000, Rs. 70,000 and Rs. 80,000 for the months of May through July, respectively.
4. Rent is Rs. 3,000 per month.
5. Wages and salaries are 10% of the previous month's sales.
6. Cash dividends of Rs. 3,000 will be paid in June.
7. Payment of principal and interest of Rs. 4,000 is due in June.
8. A cash purchase of equipment costing Rs. 6,000 is scheduled in July.
9. Taxes of Rs. 6,000 are due in June.

**SALES BUDGET FOR THE QUARTER FROM MAY TO JULY**

**CASH RECEIPTS**

<b><u>PARTICULARS</u></b>	<b><u>MAY</u></b>	<b><u>JUNE</u></b>	<b><u>JULY</u></b>
	<b>(Rs.)</b>	<b>(Rs.)</b>	<b>(Rs.)</b>
<b>OPENING BALANCE of cash</b>	<b>5000</b>	<b>5000</b>	<b>-16000</b>
Receipts from sales			
March 50,000	<b>10,000</b>	<b>—</b>	<b>—</b>
April 60,000	<b>36,000</b>	<b>12,000</b>	<b>—</b>
May 70,000	<b>14,000</b>	<b>42,000</b>	<b>14,000</b>
June 80,000	<b>—</b>	<b>16,000</b>	<b>48,000</b>
July 100,000	<b>—</b>	<b>—</b>	<b>20,000</b>
Other receipts	<b>2000</b>	<b>2000</b>	<b>2000</b>
<b>TOTAL RECEIPTS</b>	<b>62,000</b>	<b>77,000</b>	<b>68,000</b>
<b>CASH PAYMENTS</b>			
<b>CASH PURCHASES</b>	<b>50000</b>	<b>70000</b>	<b>80000</b>

<b>RENT</b>	<b>3000</b>	<b>3000</b>	<b>3000</b>
<b>WAGES AND SALERIES</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>
<b>CASH DIVIDEND</b>	<b>----</b>	<b>3000</b>	<b>-----</b>
<b>PAYMENT OF INTEREST</b>	<b>----</b>	<b>4000</b>	<b>-----</b>
<b>EQUIPMENT</b>	<b>-----</b>	<b>-----</b>	<b>6000</b>
<b>TAX</b>	<b>----</b>	<b>6000</b>	<b>----</b>
<b>TOTAL PAYMENTS</b>	<b>59000</b>	<b>93000</b>	<b>97000</b>
<b>TR – TP</b>	<b>3000</b>	<b>-16000</b>	<b>-29000</b>
<b>BANK LOAN</b>	<b>2000</b>		
<b>CLOSING BALANCE</b>	<b>5000</b>	<b>-16000</b>	<b>-29000</b>

**Question No: 26 ( Marks: 3 )**

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Ahmed Trading Company has the following information about Soap, the only product it sells. The selling price for each unit is Rs 150. the variable cost per unit is Rs 45. and the total fixed cost for the firm is Rs. 90,000. The Company has budgeted sales of Rs. 370,000 for the next period. Calculate Margin of safety in Rs

$$\text{CM} = 150 - 45 \\ = 105$$

$$\text{C/S RATIO} = 105 / 150 \\ = 0.7$$

$$\text{BREAK EVEN SALES} = 90000 / .7 \\ = 128571$$

$$\text{MOS} = \text{BUDGETED SALES} - \text{BREAK EVEN SALES} \\ = 370000 - 128571 \\ = 241,429$$

**Question No:27 ( Marks: 3 )**

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The gross profit for the company amounts to Rs. 150,000. The marketing and office expenses are Rs. 45,000 and Rs. 20,000 respectively. The financial charges for the period are Rs. 2,500. Calculate the Operating profit of a company?

**Solution:**

<b>Gross profit</b>	<b>150,000</b>
<b>LESS OPERATING EXPENSES</b>	
<b>Marketing Expenses</b>	<b>45,000</b>
<b>Office Expenses</b>	<b>20,000</b>
	<b>----- 65,000</b>
<b>OPERATIN PROFIT</b>	<b>85,000</b>

**Question No: 28 ( Marks: 5 )**

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ICI Ltd manufactured three joint products, W, X, Z in a common process. The cost and production data for March is as follows:

	<b>Rs.</b>
Opening stock	40,000
Direct material input	80,000
Conversion cost	100,000
Closing stock	20,000

Out put and sales were as follows:

<b>Products</b>	<b>Production units</b>	<b>sales units</b>	<b>sales price per unit</b>
W	20,000	15,000	4
X	20,000	15,000	6
Z	40,000	50,000	3

**Required:**

Costs are apportioned between joint products on market value basis, (Sales value of the units produced)?

	W	X	Z	Total
<b>Final Price</b>	<b>4</b>	<b>6</b>	<b>3</b>	
<b>Direct Material</b>	<b>16,000</b>	<b>24,000</b>	<b>40,000</b>	<b>80,000</b>
<b>Conversion Cost</b>	<b>20,000</b>	<b>30,000</b>	<b>50,000</b>	<b>100,000</b>
<b>Total Cost</b>	<b>36,000</b>	<b>54,000</b>	<b>90,000</b>	<b>180,000</b>
<b>-Closing Balance</b>	<b>9,000</b>	<b>13,500</b>		
<b>Net Cost</b>	<b>27,000</b>	<b>40,500</b>	<b>90,000</b>	
<b>Sales Price</b>	<b>60,000</b>	<b>90,000</b>	<b>150,000</b>	
<b>Profit</b>	<b>33,000</b>	<b>49,500</b>	<b>60,000</b>	

**Question No: 29 ( Marks: 5 )**

Briefly describes the main features of relevant cost?

A relevant cost is a cost which is related to the future expected costs that is considerable for decision making for the management. Due to the difference among alternatives it will effect the decision of management like opportunity cost. The interest rate provided by the bank against investment is an opportunity cost which an investor can earn simply without making any business activity.

**Question No: 30 ( Marks: 10 )**

Particulars	Significant Product	Incidental Product
Opening Stock	-----	-----
Production during the year	10,000 units	800 units
Closing Stock	1,000 units	100 units
Cost incurred	Rs. 6,40,000	-----
Sales price per unit	Rs. 300	Rs. 200
Further Processing cost		Rs. 50

With the help of above mentioned information, classify the incidental product treated as deduction from the cost of goods sold in the income statement of main product.

Cost Of goods Sold

Cost Incurred	640,000.00
Less Closing Stock	64,000.00
Cost Of goods Sold	576,000.00
Add Further Cost on By-Product	35,000.00
Less Sale Of By Product	(140,000.00)
Net Cost of Goods Sold	471,000.00

Sales 300*9000	2,700,000.00
COGS	471,000.00
Profit	2,229,000.00

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**Question No: 31 ( Marks: 10 )**

Describe the various stages in a budgeting process?

**Preparation of budgets**

After finalizing the forecast the preparation process of budget starts. The budget activity starts with the preparation of the said budget. Then, production budget is prepared on the basis of sales budget and the production capacity available. Financial budget (i.e. cash or working capital budget) will be prepared on the basis of sale forecast and production budget. All these budgets are combined and coordinated into -a master budget- The budgets may be revised in the course of the financial period if it becomes necessary to do so in view of the unexpected developments, which have already taken place or are likely to take place.

Below are the stages of Preparation of Budget.

**Functional Budget:** Functional Budget is prepared to start the process of budgeting.

**Sales budget:** Sales budget is the first step in process of budgeting process.

**Production Budget:** To meet the sales targets production budget is prepared.

**Raw material, Labor, FOH Budget:** In order to achieve the targets of production Raw material, Labor and FOH budgets are prepared.

**Cost of goods sold:** cost of goods sold budget is prepared after having above budgets.

**Selling & Distribution Expenses, Administrative Expenses, Financial Expenses**

**Budget:** At last to determine the net income all these said budgets are prepared.

**All the above budgets are consolidated to finalize the Master budget.**

**Question No: 32 ( Marks: 5 )**

**Basit Ali Company produces and sells Makka Cola to retailers. The Cola is bottled in 2-liter plastic bottles. The estimated budgeted sales for the year 2008 would be Rs. 80,000 and the estimated Profit for the year 2008 would be Rs. 4,060. The Margin of safety Ratio is calculated as 25%.**

Required:

1- Breakeven Sales for the year 2008

2- Projected Income statement for the year 2008

**SOLUTION**

$$\text{CM} = 4060 / .25 \\ = 16240$$

$$\text{C/S RATIO} = \text{CM} / \text{SALES} * 100 \\ = 16240 / 80000 * 100 \\ = 20.3$$

$$\text{CM} - \text{PROFIT} = \text{FIXED COST} \\ 16240 - 4060 = 12180$$

$$\text{BE SALE} = \text{FIXED COST} / \text{C/S RATIO} \\ = 12180 / .203 \\ = 60000$$

**B) PROJECTED INCOME STATEMENT**

SALES	80000
-VARIABLE COST	63760
	<hr/>
CM	16240
FIXED COST	12180
	<hr/>
PROFIT	4060
	<hr/>
	-

Question No: 33 ( Marks: 5 )

A textile company anticipates the following unit sales during the four months of 2008.

Months April May June July Sales units 20,000 30,000 25,000 40,000

The company maintains its ending finished goods inventory at 60% of the following month's sale. The April 1st, finished goods inventory will be 12,000 units.

Required: Prepare a production budget for second quarter of year.

PARTICULARS	APRIL	MAY	JUNE
SALES	20000	30000	25000
ADD ENDING INV	18000	15000	24000
TOTAL AVAILABLE	38000	45000	49000
LESS OP INV	12000	18000	15000

<b>REQUIRED PRODUCTION</b>	<b>26000</b>	<b>27000</b>	<b>39000</b>
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**Question No: 34 ( Marks: 10 )**

Rashid and company employees 10 production workers, working 8 hours a day 20 days per month at a normal capacity of 2,400 units.

The direct labor wage rate Rs. 6.30 per hour

Direct materials are budgeted Rs. 2.00 per unit produced

Fixed factory overhead Rs. 960

Supplies average Rs. 0.25 per direct labor hour

Indirect labor is 1/6 of direct labor cost and other charges are Rs. 0.45 per direct labor hour

**Required:**

Prepare a flexible budget at 60%, 80% and 100% of normal capacity. Showing total manufacturing costs as well as per unit total manufacturing costs.

<b>CAPACITY LEVELS</b>			
<b>DISCRIPTION</b>	<b>60% Suppose normal capacity</b>	<b>80%</b>	<b>100%</b>
<b>UNITS</b>	<b>2400</b>	<b>3200</b>	<b>4000</b>
<b>HOURS</b>	<b>1600 (20*8*10)</b>	<b>2133 (1600*80/60)</b>	<b>2667 (1600*100/60)</b>
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
<b>DL COST</b>	<b>10080</b>	<b>13438</b>	<b>16802</b>
<b>DM COST</b>	<b>4800</b>	<b>6400</b>	<b>8000</b>
<b>FIXED OH</b>	<b>960</b>	<b>960</b>	<b>960</b>
<b>SUPPLIES</b>	<b>400</b>	<b>533</b>	<b>667</b>
<b>IND LABOR</b>	<b>1680</b>	<b>2240</b>	<b>2800</b>
<b>OTHER CHARGES</b>	<b>720</b>	<b>960</b>	<b>1200</b>
<b>TOTLA MFG COST</b>	<b>18640</b>	<b>24531</b>	<b>30429</b>
<b>PER UNIT MFG COST</b>	<b>18640 / 2400 =7.76</b>	<b>7.66</b>	<b>7.60</b>

**Question No: 35 ( Marks: 10 )**

There are some common types of costs which you will meet when evaluating different decisions are incremental, non-incremental, spare capacity, opportunity, sunk costs. Are these likely to be relevant or non-relevant?



### **Incremental costs**

An incremental cost can be defined as a cost which is specifically incurred by following a course of action and which is avoidable if such action is not taken. Incremental costs are, by definition, relevant costs because they are directly affected by the decision

### **Non incremental cost**

These are costs, which will not be affected by the decision at hand. Non-incremental costs are non-relevant costs because they are not related to the decision at hand (i.e. non-incremental costs stay the same no matter what decision is taken).

### **Spare capacity costs**

Because of the recent advancements in manufacturing technology most enterprises have greatly increased their efficiency and as a result are often operating at below full capacity. Operating with spare capacity can have a significant impact on the relevant costs for any short-term production decision the management of such an enterprise might have to make.

If spare capacity exists in an enterprise, some costs which are generally considered incremental may in fact be non-incremental and thus, non-relevant, in the short-term.

### **Opportunity costs**

An opportunity cost is a level of profit or benefit foregone by the pursuit of a particular course of action. In other words, it is the value of an option, which cannot be taken as a result of following a different option. Opportunity costs are relevant costs for a decision only when they exceed the costs of the same item in the option to the decision under consideration

### **Sunk cost**

A sunk cost is a cost that the already been incurred and cannot be altered by any future decision. If sunk costs are not affected by a decision then they must be non-relevant costs for decision making purposes.

Sunk costs are the opposite of opportunity costs in that they are not incorporated in the decision making process even though they have already been recorded in the books and records of the enterprise

**Question No: 49 ( Marks: 3 )**

The Superior Company manufactures paint and uses a process costing system. During February, Superior started 80,000 gallons of paint. During the month the company completed 92,000 gallons and transferred them to the mixing department. Superior had 38,000 gallons in beginning inventory and 26,000 gallons in ending inventory. Material is added at the beginning of the process and conversion costs are added evenly throughout the process. Beginning WIP was 30% complete as to conversion costs and ending WIP was 20% complete as to conversion costs. The company uses a FIFO costing. The cost data for February follow:

**Beginning inventory:**

Direct materials Rs.22, 200

Conversion costs Rs. 44,000

**Costs added this period:**

Direct materials Rs. 150,000

Conversion costs Rs. 343,200

**Required:**

How many gallons were started and completed this period?

**Answer :**

Opening work in process = 38,000 gallons

Add Gallons of paint started = 80,000

Total in the department during the period = 1,18,000

Units Transferred out = 92000

Ending work in process = 26000 gallons

Units of opening work in process	38000	
Units put into the process	80,000	
		<u>118,000</u>
Units of closing work in process	26,000	
Units completed and transferred out	92,000	
		<u>118,000</u>

**Question No: 50 ( Marks: 3 )**

Product "A" has a contribution of Rs. 8 per unit; a contribution margin ratio is 50% and requires 4 machine hours to produce. Product "B" has a contribution of Rs. 12 per unit; a

contribution margin ratio is 40% and requires 5 machine hours to produce. If the constraint is machine hours to produce, then which one of the both product a company should produce and sell? Support your answer with suitable workings.

<http://vustudents.ning.com/>

**Answer :**

### **WORKING**

As the limiting factor in above case is the machine hours so we will go with that option which gives the maximum contribution margin per machine hour. This means per one hour usage of machine whichever product maximizes the contribution margin should be made and sold by the company

	PRODUCT A	PRODUCT B
Contribution Margin/Unit	8	12
Machine hour required per unit	4	5
Contribution per machine hour	2 Rs	2.4 Rs

Although one unit of A requires less time in making than one unit of B but because machine hours is a limiting factor so option B will be taken because it gives more contribution margin per machine hour than product A. So product B should be made by the company and sold instead of A.

### **Question No: 51 ( Marks: 5 )**

Liberty Pizzas delivers to the housing societies near Gulberg. The company's annual fixed costs are Rs 400,000. The sales price of a normal size pizza is Rs 100 and it costs the company Rs 60 to make and deliver each pizza.

#### **Required:**

- 1- Calculate the Break even sales in Rs and in Units.
- 2- How many Pizzas must the company sell to earn a profit of Rs.650,000

**Answer :**

1- Calculate the Break even sales in Rs and in Units.

**Answer :**

Sale price per unit = Rs 100  
Variable cost per unit = Rs 60  
Fixed Cost = Rs. 400,000

Contribution margin per unit = Sale price per unit– Variable Cost per unit  
Contribution margin per unit = 100-60 = 40

So contribution margin to sales ratio is  
 $C/S = (40/100) \times 100 = 40\%$

So break even point in rupees can be calculated as  
Break even point in rupees = Fixed Cost/contribution margin ratio  
Break even point in rupees = 400,000/.40  
**Break even point in rupees = 10,00,000 Rs**

Break even point in units = Break even point in Rs/ Sale price per unit  
Break even point in units = 10,00,000/100  
**Break even point in units = 10,000 units (10 thousand units)**

2- How many Pizzas must the company sell to earn a profit of Rs.650,000

**Answer :**

Required profit = Rs 650,000  
Required contribution margin = Required profit + Fixed cost  
Required contribution margin = 650,000 + 400,000 = Rs. 1,050,000

Contribution margin per unit = 100 – 60 = 40 Rs

So numbers of pizzas to produce to earn a profit of Rs 650,000 = 1,050,000/40  
**Numbers of pizzas to produce to earn a profit of Rs 650,000 = 26,250 pizzas**

**Question No: 52 ( Marks: 5 )**

Classify the following expenses as **Financial or Administrative expense** by filling the appropriate boxes?

Expenses	Nature of expense
Salaries of employee	<b>Administrative Expense</b>
Interest paid on debts	<b>Financial Expense</b>
Utility Bills	<b>Administrative Expense</b>

Depreciation of office equipment	Administrative Expense
Interest paid on debentures	Financial Expense

**Question No: 53 ( Marks: 10 )**

The following is the Corporation's Income Statement for last month:

Particulars	Rs.
Sales	4,000,000
Less: variable expenses	1,800,000
Contribution margin	2,200,000
Less: fixed expenses	720,000
Net income	1480,000

The company has no beginning or ending inventories. A total of 80,000 units were produced and sold last month.

**Required:**

- 3- What is the company's contribution margin ratio?
- 4- What is the company's break-even in units?
- 5- How many units would the company have to sell to attain a target profit of Rs. 820,000?

**Answer :**

- 1- [What is the company's contribution margin ratio?](#)

**Answer :**

<http://vustudents.ning.com/>

Contribution margin ratio = (Contribution margin / Sales ) X 100

Contribution margin ratio = (2,200,000/4,000,000)X 100

Contribution margin ratio = 55 %

- 2- [What is the company's break-even in units?](#)

**Answer :**

Fixed Cost = Rs 720,000

Contribution margin ratio = Rs 2,200,000

Number of units produced and sold = 80,000

Contribution margin per unit = 2,200,000/ 80,000 = Rs 27.5

Break even point in Units = Fixed Cost/ Contribution margin per unit

Break even point in Units = 720,000/ 27,5

Break even point in Units = 26181.82 or approximately 26,182 units

3- How many units would the company have to sell to attain a target profit of Rs. 820,000?

**Answer :**

We know that

Contribution margin per unit = Total Contribution margin/ Total units sold

Contribution margin per unit = 2,200,000/80,000 = 27.5 Rs

So target profit = 820,000

Target contribution margin in Rs= 820,000 + 720,000 (fixed cost)

Target contribution margin in Rs = 1,540,000

No. of units = Target contribution margin in rupees/Contribution margin per unit

No of Units to produce = 1,540,000/27.5 = 56,000 units

So to attain a target profit of Rs 820,000 total units that should be produced are 56,000 units

**Question No: 54 ( Marks: 10 )**

The manufacturing Company estimates its factory overhead to be as follows:

Fixed expense per month	Rs.	Variable rate (Rs.) per direct labor hour
Indirect material	2,000	
Indirect Labor	900	0.2
Maintenance	1200	0.3
Heat and Light	300	
Power	200	0.55
Insurance	270	
Taxes	600	
Payroll Taxes	0	0.10
Depreciation	1,350	

Assuming that the direct labor hours for January, February and March are 2,640, 4,740 and 2,370 hours respectively.

**Required:**

Prepare factory overhead budget for the first quarter.

**Question No: 49 ( Marks: 3 )**

Ahmed Trading Company has the following information about Soap, the only product it sells. The selling price for each unit is Rs 150. the variable cost per unit is Rs 45. and the total fixed cost for the firm is Rs. 90,000. The Company has budgeted sales of Rs. 370,000 for the next period. Calculate Margin of safety in Rs.

	Per Unit	Amount
Sales	150.00	370,000.00
Variable Cost	<u>45.00</u>	<u>111,000.00</u>
Cont Margin	105.00	259,000.00
Fixed Cost		<u>90,000.00</u>
Profit		169,000.00

Margin Of Safety = Budgeted Sales - Breakeven Sales

Break Even Sales = Fixed Cost/Contibution Margin Per Unit = No. Of units of Breakeven Sales

Units to be sold for Breakeven = 857.14  
Selleing price = 150

Breakeven Sales in Rs. =128,571.43

Margin Of Safety in Rs =370,000-128,571.43

Margin Of Safety in Rs. =241,428.57

$$\begin{aligned} \text{CM} &= 150 - 45 \\ &= 105 \end{aligned}$$

$$\begin{aligned} \text{C/S RATIO} &= 105 / 150 \\ &= 0.7 \end{aligned}$$

$$\begin{aligned} \text{BREAK EVEN SALES} &= 90000 / .7 \\ &= 128571 \end{aligned}$$

$$\begin{aligned} \text{MOS} &= \text{BUDGETED SALES} - \text{BREAK EVEN SALES} \\ &= 370000 - 128571 \\ &= 241,429 \end{aligned}$$

**Question No: 50 ( Marks: 3 )**

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The gross profit for the company amounts to Rs. 150,000. The marketing and office expenses are Rs. 45,000 and Rs. 20,000 respectively. The financial charges for the period are Rs. 2,500. Calculate the Operating profit of a company?

**Solution:**

<b>Gross profit</b>	<b>150,000</b>	
<b>LESS OPERATING EXPENSES</b>		
<b>Marketing Expenses</b>	<b>45,000</b>	
<b>Office Expenses</b>	<b>20,000</b>	
	<b>-----</b>	<b>65,000</b>
<b>OPERATING PROFIT</b>		<b>85,000</b>

**Question No: 51 ( Marks: 5 )**

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ICI Ltd manufactured three joint products, W, X, Z in a common process. The cost and production data for March is as follows:

	<b>Rs.</b>
Opening stock	40,000
Direct material input	80,000
Conversion cost	100,000
Closing stock	20,000

Out put and sales were as follows:

<b>Products</b>	<b>Production units</b>	<b>sales units</b>	<b>sales price per unit</b>
W	20,000	15,000	4
X	20,000	15,000	6
Z	40,000	50,000	3

**Required:**

Costs are apportioned between joint products on market value basis, (Sales value of the units produced)?

	<b>W</b>	<b>X</b>	<b>Z</b>	<b>Total</b>
<b>Final Price</b>	<b>4</b>	<b>6</b>	<b>3</b>	
<b>Direct Material</b>	<b>16,000</b>	<b>24,000</b>	<b>40,000</b>	<b>80,000</b>
<b>Conversion Cost</b>	<b><u>20,000</u></b>	<b><u>30,000</u></b>	<b><u>50,000</u></b>	<b><u>100,000</u></b>



<b>Total Cost</b>	<b>36,000</b>	<b>54,000</b>	<b>90,000</b>	<b>180,000</b>
<b>-Closing Balance</b>	<b><u>9,000</u></b>	<b><u>13,500</u></b>		
<b>Net Cost</b>	<b>27,000</b>	<b>40,500</b>	<b>90,000</b>	
<b>Sales Price</b>	<b><u>60,000</u></b>	<b><u>90,000</u></b>	<b><u>150,000</u></b>	
<b>Profit</b>	<b>33,000</b>	<b>49,500</b>	<b>60,000</b>	

**Question No: 52 ( Marks: 5 )**

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Briefly describes the main features of relevant cost?

A relevant cost is a cost which is related to the future expected costs that is considerable for decision making for the management. Due to the difference among alternatives it will effect the decision of management like opportunity cost. The interest rate provided by the bank against investment is an opportunity cost which an investor can earn simply without making any business activity.

**Question No: 53 ( Marks: 10 )**

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<b>Particulars</b>	<b>Significant Product</b>	<b>Incidental Product</b>
Opening Stock	-----	-----
Production during the year	10,000 units	800 units
Closing Stock	1,000 units	100 units
Cost incurred	Rs. 6,40,000	-----
Sales price per unit	Rs. 300	Rs. 200
Further Processing cost		Rs. 50

With the help of above mentioned information, classify the incidental product treated as deduction from the cost of goods sold in the income statement of main product.

Cost Of goods Sold

Cost Incurred	640,000.00
Less Closing Stock	<u>64,000.00</u>
Cost Of goods Sold	576,000.00
Add Further Cost on By-Product	35,000.00
Less Sale Of By Product	<u>(140,000.00)</u>
Net Cost of Goods Sold	471,000.00
Sales 300*9000	2,700,000.00
COGS	<u>471,000.00</u>
Profit	2,229,000.00

**Question No: 54 ( Marks: 10 )**

---

Describe the various stages in a budgeting process?

**Preparation of budgets**

After finalizing the forecast the preparation process of budget starts. The budget activity starts with the preparation of the said budget. Then, production budget is prepared on the basis of sales budget and the production capacity available. Financial budget (i.e. cash or working capital budget) will be prepared on the basis of sale forecast and production budget. All these budgets are combined and coordinated into -a master budget- The budgets may be revised in the course of the financial period if it becomes necessary to do so in view of the unexpected developments, which have already taken place or are likely to take place.

Below are the stages of Preparation of Budget.

**Functional Budget:** Functional Budget is prepared to start the process of budgeting.

**Sales budget:** Sales budget is the first step in process of budgeting process.

**Production Budget:** To meet the sales targets production budget is prepared.

**Raw material, Labor, FOH Budget:** In order to achieve the targets of production Raw material, Labor and FOH budgets are prepared.

**Cost of goods sold:** cost of goods sold budget is prepared after having above budgets.

**Selling & Distribution Expenses, Administrative Expenses, Financial Expenses Budget:** At last to determine the net income all these said budgets are prepared.

**BUDGETED INCOME STATEMENT**

**All the above budgets are consolidated to finalize the Master budget.**

**Question No: 13 ( Marks: 5 )**

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Golden Company sells its product for Rs. 42 per unit. The company's unit product cost based on the full capacity of 400,000 units is as follows:

Direct materials	Rs. 8
Direct labor	10
Manufacturing overhead	12
Unit product cost	Rs. 30

A special order offering to buy 40,000 units has been received from a foreign distributor. The only selling costs that would be incurred on this order would be Rs. 6 per unit for shipping. The company has sufficient idle capacity to manufacture the additional units. Two-thirds of the manufacturing overhead is fixed and would not be affected by this order. Assume that direct labor is an avoidable cost in this decision. In negotiating a price for the special order, calculate the minimum acceptable selling price per unit?

**Question No: 14 ( Marks: 5 )**

Data concerning P Co's single product is as follows:

	Rs./unit
Selling price	7.00
Variable cost	3.00
Fixed production cost	4.00
Fixed selling cost	1.00

Budgeted production and sales for the year are 12,000 units.

Required: What will be the company's new Break Even point, to the nearest whole unit if it is expected that the variable production cost per unit will each increase by 10% and fixed cost will rise by 25% and other things remains same.

Note: it is necessary to show complete working

**Question No: 15 ( Marks: 3 )**

A company is considering publishing a limited edition book bound in special leather. It has in stock the leather bought some years ago for Rs. 1,000. To buy an equivalent quantity now would cost Rs. 2,000. The company has no plans to use the leather for other purposes, although it has considered the possibilities:

- v Of using it to cover desk furnishings, in replacement for other material which could cost Rs. 900
- v Of selling it if a buyer could be found (the proceeds are unlikely to exceed Rs. 800).

**Solution:-**

In calculating the likely profit from the proposed book before deciding to go ahead with the project, the leather would not be costed at Rs. 1000. The cost was incurred in the past for some reason which is no longer relevant. The leather exists and could be used on the book without incurring any specific cost in doing so. In using the leather on the book, however, the company will lose the opportunities of either disposing of it for Rs. 800 or of using it to save an outlay of Rs. 900 on desk furnishings.

The better of these alternatives, from the point of view of benefiting from the leather, is the latter. "lost opportunity" cost of Rs 900 will there for be included in the cost of the books for decision making purposes

Also visit

<http://www.scribd.com/doc/30800321/cost-accounting-5>

**Question No: 16 ( Marks: 3 )**

---

Following information is available for preparing the Direct Labour Cost Budget:

- No. of workers required = 10 workers
- Work performance = 160 hours
- Rate = Rs. 40 per hour

**Required:**

Calculate the estimated amount of direct labour cost to produce 2,400 units based on the above information.

Solution:-

worker (160 hrs @ Rs 40)= Rs 6,400 x 10 workers = 64,000

**Question No: 17 ( Marks: 5 )**

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Production component	Rates	Per unit Rate
Direct material	2.5 lbs @ Rs. 4.00	Rs. 10.00
Direct Labor	.5 hr @ Rs. 16.00	Rs. 8.00
VOH	.5 hr @ Rs. 4.00	Rs. 2.00
Fixed FOH	Rs. 40,000	Rs. 2.50
Actual Output	16,000 units	
Variable S&A	Rs. 6.00 per unit	
Fixed S&A	Rs. 60,000	
Selling price	Rs. 40	

Assume sales of 18,000 units.

**Required:** What is the profit under marginal costing method?

**ANSWER:-**

**INCOME STATEMENT**

**MARGINAL COSTING**

**FOR THE PERIOD ENDED....**

<b>PARTICULARS</b>	<b>AMOUNT IN Rs.</b>	<b>AMOUNT IN Rs.</b>
Sales 18000*40		720,000
CGS:		
Opening inventory NOTE 1 2000*20	40,000	
Cost of goods manufactured 16000 * 20	320,000	
Closing inventory	-	<u>(360,000 )</u>
GROSS CM		360,000
Less variable period cost: selling n admin exp 18000*6		<u>(108,000)</u>
NET CM		252,000
Less fixed period cost		
Manufacturing OH	40,000	
Selling n admin OH	60,000	<u>(100,000)</u>
<b>NET PROFIT</b>		<u>152,000</u>

NOTE 1 = Since production is 16000 & sales is 18000, so there must be 2000units lying in opening inventory

Per unit product cost= material + labor +variable OH  
 $=10 +8+ 2 = 20$

**Question No: 18 ( Marks: 5 )**

Hussain Corporation annually produces 10,000 units of assembly part number 206. An outside supplier has offered to manufacture the part at Rs. 9 per unit. If Hussain Corporation decides to buy the part, they will be able to rent the existing area for Rs. 8,000 per year. Listed below are Hussain's total costs to produce part 206:

	<b>Rs.</b>	<b>Total (Rs.)</b>
Direct material	2.50	25,000
Direct Labor	4.00	40,000
Variable overhead	2.25	22,500
Fixed Overhead	0.75	7,500
<b>Total</b>	<b>9.50</b>	<b>95,000</b>

Assuming that no additional costs are incurred in purchasing the part, what should be the opportunity cost for Hussain Corporation if it will buy? Support your answer with computations.

**VC of making = 8.75 / unit**  
**VC of buying = 9 / unit**

**Extra cost of buying = 0.5 / unit**

Particulars	Amount/Qty
Units to be made annually	10000units
Extra cost of buying	Rs.5000
Savings from Rent annually	Rs.8000
Available benefit	Rs.3000

**Question No: 19 ( Marks: 5 )**

Classify the following expenses as **Financial or Administrative expense** by filling the appropriate boxes?

Expenses	Nature of expense
Salaries of employee	
Interest paid on debts	
Utility Bills	
Depreciation of office equipment	
Interest paid on debentures	

Solution:

Expenses	Nature of expense
Salaries of employee	Admin
Interest paid on debts	Financial
Utility Bills	Admin
Depreciation of office equipment	Admin
Interest paid on debentures	Financial

**Question No: 20 ( Marks: 3 )**

A study has been conducted to determine if one of the departments of Mead Company should be discontinued. The contribution margin in the department is Rs. 150,000 per year. Fixed expenses charged to the department are Rs. 195,000 per year. It is estimated that Rs. 120,000 of these fixed expenses could be eliminated if the department is discontinued. Will it be favorable to discontinue department operations? Support your answer with suitable working.

Solution:

	Old		New
Contribution Margin	= 150 000		-----
Fixed Expense	= (195 000)	-120000	(75000)
Loss / profit:	=(45000)		(75000)

It will not be favorable to discontinue department operations.

**Question No: 21 ( Marks: 3 )**

The following information is available for Atlas Corporation to prepare a cash budget for the month of September:

- Cash on hand beginning of September Rs. 16,000
- Expected receipts in September Rs. 272,000
- Sales salaries paid Rs. 62,000
- Material purchases (all in cash) Rs. 190,000
- Depreciation Rs. 44,000

**Required:** Calculate ending cash balance in September. Also show complete working.

Solution:-

**Atlas Corporation  
Cash Budget  
For the month of Sep...**

Particulars	Amount in Rs.
Opening Balance	16000
Add: Receipts	272000
<b>Total 1</b>	<b>288000</b>
Less: Payments	
Sales Salaries	62000
Material Purchases	190000
<b>Total 2</b>	<b>252000</b>
<b>C/S</b>	
<b>Total 1- Total 2</b>	<b>36000</b>
Bank O/D	NIL

**Question No: 22 ( Marks: 5 )**

The Carter Manufacturing Company estimates its production requirements to be 30,000 units for October, 38,000 units for November and 41,000 units for December. It takes 3 direct labor hours at a rate of Rs. 3 per hour to complete one unit.

**Prepare direct Labor budget cost for the last quarter of the year.**

Solution:-

Particulars	OCT	NOV	DEC
Hrs/Unit	3	3	3
Units to be manufactured	30000	38000	41000
Hrs to manufacture req. units	90000	114000	123000
Cost per Hr. in Rs.	3	3	3
Cost of manufacturing req. units (Rs)	270000	342000	369000
Total labor cost of the quarter	Rs.981000		

**Question No: 23 ( Marks: 5 )**

Data concerning P Co's single product is as follows:

	Rs./unit
Selling price	7.00
Variable cost	3.00
Fixed production cost	4.00
Fixed selling cost	1.00

Budgeted production and sales for the year are 12,000 units.

**Required:** What will be the company's new Break Even point, to the nearest whole unit if it is expected that the variable production cost per unit will each increase by 10% and fixed cost will rise by 25% and other things remains same.

**Note:** it is necessary to show complete working

**B.E.Sales in units = FC/ CM per unit**

Old B.E.Sales in units

$$= 48000 / 4 = 12000$$

New B.E.Sales in units

VC is increased by 10% so now per unit VC is Rs.3.3/Unit

FC is increased by 25% so now new FC is Rs.60000

New CM/ Unit = S/unit – VC/Unit

$$= 7 - 3.3$$

$$= 3.7$$

B.E.Sales in units = FC/CM per unit

$$= 60000 / 3.7$$

$$= 16216 \text{ units ( rounded to the nearest whole unit)}$$

B.E.Sales in Rs.= 16216 x 7 = 113512 Rs.

VC = Rs.53512

Particulars	Amount in Rupees
<b>Sales</b>	<b>113512</b>
Less VC	53512
<b>Contribution margin</b>	<b>60000</b>
Less FC	60000
<b>Profit</b>	<b>NIL</b>

**Question No: 24 ( Marks: 5 )**

G incorporation a manufacturer of skin care products is considering dropping from its line Moisturizing Cream, which is currently losing money. Following information of G incorporation's three products are given below.

	Cleansers & Toners	Moisturizing Cream	Eye Care Creams
--	-----------------------	-----------------------	--------------------



	(Rs)	(Rs)	(Rs)
Sales revenue	500,000	300,000	400,000
<b>Less: Variable Cost</b>	230,000	200,000	230,000
Contribution margin	270,000	100,000	170,000
<b>Less: Fixed Cost:</b>			
Separable cost	50,000	59,000	40,000
Common cost	106,000	60,000	85,000
<b>Profit (loss)</b>	<b>114,000</b>	<b>(19,000)</b>	<b>45,000</b>

**Required:** What do you think that G incorporation should discontinue the product line Moisturizing Cream? Support your answer with complete working.

**By dropping the moisturizing line results will be as follows**

#### **Differential cost statement**

	Current Business (Rs)	Shut down ( Rs.)	Difference
Sales revenue	300,000	-----	-----
<b>Less: Variable Cost</b>	200,000	-----	-----
Contribution margin	100,000	-----	(100,000)
<b>Less: Fixed Cost:</b>			
Separable cost	59,000	-----	59000
Common cost	60,000	60,000	-----
<b>Profit (loss)</b>	<b>(19,000)</b>	<b>(60,000)</b>	<b>(41,000)</b>

Loss of contribution Margin = (100,000)

Gain from FC = 59,000

Differential Loss = (41,000)

Earlier we were bearing a loss of Rs. 19,000 now its Rs. 60,000 so we should not suffer from this additional loss of Rs. 41,000 and continue with moisturizing range.

#### **Question No: 25 ( Marks: 3 )**

A study has been conducted to determine if one of the departments of Mead Company should be discontinued. The contribution margin in the department is Rs. 150,000 per year. Fixed expenses charged to the department are Rs. 195,000 per year. It is estimated that Rs. 120,000 of these fixed expenses could be eliminated if the department is discontinued. Will it be favorable to discontinue department operations? Support your answer with suitable working.

#### **Question No:26 ( Marks: 3 )**

The following information is available for Atlas Corporation to prepare a cash budget for the month of September:

- Cash on hand beginning of September Rs. 16,000
- Expected receipts in September Rs. 272,000
- Sales salaries paid Rs. 62,000
- Material purchases (all in cash) Rs. 190,000
- Depreciation Rs. 44,000

**Required:** Calculate ending cash balance in September. Also show complete working.

**Question No: 27 ( Marks: 5 )**

The Carter Manufacturing Company estimates its production requirements to be 30,000 units for October, 38,000 units for November and 41,000 units for December. It takes 3 direct labor hours at a rate of Rs. 3 per hour to complete one unit.

**Prepare direct Labor budget cost for the last quarter of the year.**

**Question No: 28 ( Marks: 5 )**

Data concerning P Co's single product is as follows:

	Rs./unit
Selling price	7.00
Variable cost	3.00
Fixed production cost	4.00
Fixed selling cost	1.00

Budgeted production and sales for the year are 12,000 units.

**Required:** What will be the company's new Break Even point, to the nearest whole unit if it is expected that the variable production cost per unit will each increase by 10% and fixed cost will rise by 25% and other things remains same.

**Note:** it is necessary to show complete working

**Question No: 29 ( Marks: 5 )**

G incorporation a manufacturer of skin care products is considering dropping from its line Moisturizing Cream, which is currently losing money. Following information of G incorporation's three products are given below.

	Cleansers & Toners (Rs)	Moisturizing Cream (Rs)	Eye Care Creams (Rs)
Sales revenue	500,000	300,000	400,000
<b>Less: Variable Cost</b>	230,000	200,000	230,000
Contribution margin	270,000	100,000	170,000
<b>Less: Fixed Cost:</b>			
Separable cost	50,000	59,000	40,000
Common cost	106,000	60,000	85,000
<b>Profit (loss)</b>	<b>114,000</b>	<b>(19,000)</b>	<b>45,000</b>

**Required:** What do you think that G incorporation should discontinue the product line Moisturizing Cream? Support your answer with complete working.

**Question No: 49 ( Marks: 3 )**

XYZ manufacturing company expects the following sales in units for the 1<sup>st</sup> quarter of next year:

Month	December	January	February	March	April
Sales in units	500	560	620	820	600

The company desires an ending inventory of finished units of 30% of the next month's sales.

**Required:**

Prepare budgeted production for the month January

**Question No: 30 ( Marks: 3 )**

Your Company regularly uses material X and currently has in stock 500 Kg for which it paid Rs. 1,500 two weeks ago. If this ever to be sold as raw material, it could be sold today for Rs. 2.00 per Kg. You are aware that the material can be bought in open market for Rs. 3.25 per Kg but it must be purchased in quantities of 1,000 Kg. What would be the relevant cost for material X?

Cost of purchase = 1500

Cost as of today  $2 \times 500 = 1000$

Cost in open market  $3.25 \times 500 = 1625$

Relevant Cost  $1625 - 1000 = 625$

**Question No:31 ( Marks: 5 )**

A study has been conducted to determine if one of the departments of Sparrow Company should be discontinued. The contribution margin in the department is Rs. 150,000 per year. Fixed expenses charged to the department are Rs. 130,000 per year. It is estimated that Rs. 120,000 of these fixed expenses could be eliminated if the department is discontinued.

- v If the department is discontinued, what will be the impact on the company's overall net operating income?
- v Which costs are irrelevant to this decision?

Ans. If the departments is discontinued then the impact would be;

a.  $150000 - (130000 - 120000) = 40000$  net operating income would increase

**Question No: 32 ( Marks: 5 )**

Production component	Rates	Per unit Rate
Direct material	2.5 lbs @ Rs. 4.00	Rs. 10.00
Direct Labor	.5 hr @ Rs. 16.00	Rs. 8.00

VOH	.5 hr @ Rs. 4.00	Rs. 2.00
Fixed FOH	Rs. 40,000	Rs. 2.50
Actual Output	16,000 units	
Variable S&A	Rs. 6.00 per unit	
Fixed S&A	Rs. 60,000	
Selling price	Rs. 40	

**Required:** What do the income statements look like under Absorption costing approaches if actual sales equal 16,000 units?

**Question No: 33 ( Marks: 5 )**

A Company manufactures two products A and B. Forecasts for first 7 months is as under:

Month	Sales in Units	
	A	B
January	1,000	2,800
February	1,200	2,800
March	1,610	2,400
April	2,000	2,000
May	2,400	1,600
June	2,400	1,600
July	2,000	1,800

No work in process inventory has been estimated in any month however finished goods inventory shall be on hand equal to half the sales to the next month, in each month. This is constant practice.

Budgeted production and production costs for the year 1999 will be as follows:

Production units	22,500	24,000
Direct Materials (per unit)	12.5	19
Direct Labor (per unit)	4.5	7
F.O.H. (apportioned)	Rs. 66,000	Rs 96,000

Prepare for the six months period ending June 1999, a production budget for **“Product B”**

**Question No: 34 ( Marks: 3 )**

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Nomi Limited budgets to make 4,000 units of product X and estimates that the standard material cost per unit will be Rs. 6. In fact 3,800 units are produced at a material cost of Rs. 24,700. For the purpose of budgetary control, what will be the actual and budgeted figure of material cost?

Solution:-

Price of the material according to budgeted cost/ unit

= 3800 units x Rs.6 / unit

= 22,800 Rs

Price of the material according to the actual cost/ unit

= 3800 units x Rs.6.5/ unit

= 24700 Rs

Variance = budgeted – actual

= 22,800 – 24,700

= (1900 ) unfavorable balance

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**Question No: 35 ( Marks: 3 )**

What is a principle budget factor?

Solution:-

Some factor like labor or material which are short in supply.

This could be because of shortage of material, staff hours, machine capacity even money.

It is the factor which ultimately decides the activity level planned. Like a company wanted to produce 100,000 pieces of computer but skilled labor available is able to produce only.

So labor is principle budget factor in this case.

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**Question No: 36 ( Marks: 5 )**

Hussain Corporation annually produces 10,000 units of assembly part number 206. An outside supplier has offered to manufacture the part at Rs. 9 per unit. If Hussain Corporation decides to buy the part, they will be able to rent the existing area for Rs. 8,000 per year. Listed below are Hussain's total costs to produce part 206:

	Rs.	Total (Rs.)
Direct material	2.50	25,000
Direct Labor	4.00	40,000
Variable overhead	2.25	22,500

Fixed Overhead	0.75	7,500
<b>Total</b>	<b>9.50</b>	<b>95,000</b>

Assuming that no additional costs are incurred in purchasing the part, what should be the opportunity cost for Hussain Corporation if it will buy? Support your answer with computations.

Solution

**VC of making = 8.75 / unit**

**VC of buying = 9 / unit**

**Extra cost of buying = 0.5 / unit**

Particulars	Amount/Qty
<b>Units to be made annually</b>	<b>10000units</b>
<b>Extra cost of buying</b>	<b>Rs.5000</b>
<b>Savings from Rent annually</b>	<b>Rs.8000</b>
<b>Available benefit</b>	<b>Rs.3000</b>

**Question No: 37 ( Marks: 5 )**

Classify the following expenses as **Financial or Administrative expense** by filling the appropriate boxes?

Expenses	Nature of expense
Salaries of employee	?
Interest paid on debts	?
Utility Bills	?
Depreciation of office equipment	?
Interest paid on debentures	?

Solution:-

Expenses	Nature of expense
Salaries of employee	Admin
Interest paid on debts	Financial
Utility Bills	Admin
Depreciation of office equipment	Admin
Interest paid on debentures	Financial

**Question No: 38 ( Marks: 5 )**

Data concerning P Co's single product is as follows:

	Rs./unit
Selling price	7.00
Variable cost	3.00

Fixed production cost	4.00
Fixed selling cost	1.00

Budgeted production and sales for the year are 12,000 units.

**Required:** What will be the company's new Break Even point, to the nearest whole unit if it is expected that the variable production cost per unit will each increase by 10% and fixed cost will rise by 25% and other things remains same.

**Note:** it is necessary to show complete working

Solution

**B.E.Sales in units = FC/ CM per unit**

Old B.E.Sales in units

$$= 48000 / 4 = 12000$$

New B.E.Sales in units

VC is increased by 10% so now per unit VC is Rs.3.3/Unit

FC is increased by 25% so now new FC is Rs.60000

New CM/ Unit = S/unit – VC/Unit

$$= 7 - 3.3$$

$$= 3.7$$

B.E.Sales in units = FC/CM per unit

$$= 60000 / 3.7$$

$$= 16216 \text{ units ( rounded to the nearest whole unit)}$$

B.E.Sales in Rs.= 16216 x 7 = 113512 Rs.

VC = Rs.53512

Particulars	Amount in Rupees
Sales	113512
Less VC	53512
<b>Contribution margin</b>	<b>60000</b>
Less FC	60000
<b>Profit</b>	<b>NIL</b>