Solution 1

The Blue Cylindrical Company Ltd		
Journal		
Particulars	**Dr ($)**	**Cr ($)**
Dividend Expense Dr	2000	
Cash Account Credit		2000
(Being the dividend paid)		
Interest Expense Dr (100000*4%)	4000	
Cash Cr		4000
(Being interest paid)		
Annual Insurance - Plant & Machinery Dr	2000	
Cash Credit		2000
(Being annual insurance paid)		
Depreciation - Plant and Equipment Dr	4250	
Accumulated Depreciation Cr (18000-1000)/4		4250
(Being depreciation expense recorded)		
Accounts Receivable Dr	420000	
Sales Cr (1200*350)		420000
(Being sales made)		
Inventory Debit (180000+80000)	260000	
Accounts Payable Cr		260000
(Being the inventory manufactured)		
Accounts Payable Dr	10000	
Cash Cr		10000
(Being payment made to creditors)		
Cash Dr	54000	
Accounts Receivable Cr		54000
(Being cash received from Customers)		
Council Rates Dr	11000	
Sales Commission Dr (420000*10%)	42000	
Fixed Administration Salaries Dr	45000	
Cash Cr		98000
(Being the manufacturing expenses paid)		

Solution 2

The Blue Cylindrical Company Ltd		
Trial Balance		
Particulars	**Dr ($)**	**Cr ($)**
Cash	56,000	
Accounts Payable		368,000
Accounts Receivable	466,000	
Retained Earnings		7,000
Inventory (150 units @ $200 each)	30,000	
Notes payable		100,000
Ordinary shares issued		20,000
Plant and equipment	18,000	
Accumulated depreciation – plant and equipment		14,250
Patents – unique manufacturing process	15,000	
Artwork	3,000	
Overdraft		9,000
Dividend Expense	2,000	
Interest Expense	4,000	
Annual Insurance - Plant & Machinery	2000	
Depreciation - Plant and Equipment	4250	
Sales		420000
Cost of Goods Sold	240000	
Council Rates	11000	
Sales Commission	42000	
Fixed Administration Salaries	45000	
Total	**938,250**	**938,250**

Solution 3

The Blue Cylindrical Company Ltd		
Income Statement		
For the Year Ended 31st December, 2017		
Particulars	**Amount**	**Amount**
Sales		420000
Less: Cost of Goods Sold		240000
Gross Profit		***180000***
Less: Indirect Expenses		
Interest Expense	4000	
Annual Insurance - Plant & Machinery	2000	
Depreciation - Plant and Equipment	4250	
Council Rates	11000	
Sales Commission	42000	
Fixed Administration Salaries	45000	108250
Net Profit		***71750***

Solution 4

The Blue Cylindrical Company Ltd	
Balance Sheet	
As at 31st December, 2017	
Particulars	**Amount**
Assets:	
Cash	56,000
Accounts Receivable	466,000
Inventory	30,000
Plant and equipment (net)	3,750
Patents – unique manufacturing process	15,000
Artwork	3,000
Total Assets	***573,750***
Liabilities	
Accounts Payable	368,000
Overdraft	9,000
Notes payable	100,000
Ordinary shares issued	20,000
Retained Earnings	76,750
Total Liabilities and Equity	***573,750***

Note: The ordinary shares have been increased by $10000 to match the balance of the initial accounting information.

Solution 5

The patents have been recognized by the company at same balance as that of the previous year. These assets have not been amortized in the current year therefore the current year profit has not been reduced by the amortization cost of the patents. It is important to review the intangible assets for impairment at least once a year. Therefore, the company must consider determining its recoverable value to ensure that the carrying value of the patents is not in excess of its recoverable amount.

The artwork is currently being recorded by the company as an asset. However, the artwork had been purchased by the CEO of the company using the cash balance of the company. The artwork is lying with the CEO of the company. A fixed asset is an asset that is acquired for the purpose of earning economic benefit from the usage of the asset. However, in this case the company is not earning any economic benefit from the asset rather it is present in the balance sheet of the company because it has been purchased by utilizing the asset of the company. Since, the asset is not being utilized by the company for its operations it must be considered as remuneration in kind that has been given to the CEO. It must be presented in the balance sheet of the company as loan or advance that has been made to an employee rather than recording it as an asset. The company assets have been utilized for the purpose of acquisition of the asset but it has not been purchased for the company therefore, it must not be presented as an asset of the company. It must be rather recognized loan or advance rendered by the company to its employee and must not form part of an intangible asset of the company.

Solution 6

Computation of Contribution Margin per Unit	
Particulars	**Amount**
Sale Price per unit	350
Less: Variable Costs:	
Inventory Cost	200
Sales Commission	35
Contribution per unit	**115**
Contribution Margin	**32.86%**

The contribution per unit is the excess of sales price over the variable costs of the goods. The contribution is obtained by deducting the variable cost from the sales. It states if the business is at least able to recover the variable cost that is being incurred on the products. In some industries, the company might operate at no profit in the initial phase due to the long gestation period but they will ensure that they have a position contribution from the sales. Basically, positive contribution indicates that the entity is able to make short-term profit. It might not be able to cover the fixed costs that are attributable to the business but can definitely cover the variable costs that are being incurred on the sales. If the company has a negative profit and a positive contribution there is a possibility that it would turn profitable in the long-term but if the contribution is negative as well then the company must discontinue the operations because it is not even able to recover the cost that are being specifically incurred on the products that are being sold.

High contribution margin indicates that the gross profit of the company is high and it would be able to meet the indirect expenses efficiently. It also implies that the firm has bargaining power and is able to obtain the raw materials and other inputs at a lower rate. It is also important to compare the sale price of the product to the market price to assess the preference of the sale price that has been fixed by the company. High sale price would also generate high contribution margin but it might hamper the growth of the company because if the customers think that they are unable to get value for money they might switch to competitor products. It is important to identify the factors that resulted in high contribution margin for the company.

Solution 7

Computation of Break Even Units		
Sl. No.	**Particulars**	**Amount**
a	Contribution per unit	115
b	Fixed Costs (Note 1)	66250
c	**Break Even Units (b/a)**	**576.087**

Note 1

Computation of Fixed Cost	
Particulars	**Amount**
Interest Expense	4000
Annual Insurance - Plant & Machinery	2000
Depreciation - Plant and Equipment	4250
Council Rates	11000
Fixed Administration Salaries	45000
Total Fixed Cost	***66250***

Note: All the costs are committed in nature and have to be incurred and most of them are expected to remain constant over the years therefore, they have been included as fixed cost of the company.

Solution 8

Operating Leverage is the measure of change in the profits of the company with change in the quantity of units that are sold. It is a measure of the volatility or degree of fluctuation in the operating income of the company. In the given case, the contribution margin of the company is almost 33% which implies that the operating leverage for the company is very high. Change in the sale units would highly impact the profit of the company as well. The sale price and the variable cost of the company are subject to change in marginal costing while the fixed costs are the committed costs that have to be incurred irrespective of the level of production. Therefore in this case only the sale price and the variable cost of the company are volatile as they are subject to change with a change in the market condition. The fixed costs are the committed costs or the appropriations whose amount is certain.

In the given case, it can be observed that the company has a patent for unique manufacturing process. This can be expected to be the main factor that would be attributable to the high contribution margin for the company. It would be able to manufacture the goods at a cheaper rate due to its patent would sell them in the market at prices equivalent to that of the competitors to earn high margin. However, recently a competitor also invented a manufacturing process that produces result similar to that of BCCL. It implies that the cost of production for the competitor would reduce due to the usage of the new manufacturing process. If the competitor reduces the price of the products as it intends to earn the same margin then the company would also have to reduce the selling price of its goods to sustain the demand of its products. The company is currently enjoying a dominant position due to the usage of the patented manufacturing process however it may lose this position due to the increased efficiency of a competitor. Therefore, the external environment is expected to place a negative impact on the business of the company and might gradually result in lower operating leverage in the future period.

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