	Analysis of Financial Statements:	Information Needs:
1	Change	1 Liquidity
2	% Change	2 Solvency
3	Ratio Analysis	3 Profitability
4	Trend Analysis	
5	Horizontal and Vertical Analysis	

1 Change:

Change = Current Year Amount - Last Year Amount

2 Change %:

Change % = (Current Year Amount - Last Year Amount) / Last Year Amount x 100

Or

Current Year Amount / Last Year Amount x 100

Ratio Analysis:

1. Liquidity Ratios
2. Profitability Ratios
3. Solvency Ratios
4. Market Ratio

1 Liquidity Ratios:

a Working Capital:

Working Capital = Current Assets - Current Liabilities

Working capital means the current assets that will be remaining if all current liabilities are paid.This amount is used to perform business operations like paying salary, taxes, rent, insurance etc.

b Current Ratio:

Current Ratio = Current Assets / Current Liabilities

It shows how much greater or smaller the current assets are as compare to current liabilities.It shows how much % of current liability will be remaining in the form of current assets after paying it fully.

c Quick/Acid-Test Ratio:

Quick/Acid-Test Ratio: [Current Assets - (Inventory + Supplies + Prepaid Expense)] / Current Liability
or
Quick Ratio = [Cash + Bank+Marketable Securities+Receivables] / Current Liability
or
Quick Ratio = Quick Assets / Current Liability

It shows how much greater or smaller the quick assets are as compare to current liabilities.It shows how much % of current liability will be remaining in the form of quick asset after paying it fully.

d	**Inventory Turnover Ratio/Inventory Holding Period:**	
	In times:	
	Inventory Turnover Ratio(Times): Cost of Goods Sold/Average Inventory Average Inventory = (Beginning Inverntory + Ending Inventory)/ 2	It shows how many times the average inventory is sold and converted into receivable during the accounting period.
	In Days	
	Inventory Turnover(Days) = Days of Accounting Year/Inventory Turnover-in times Or Inventory Turnover(Days)=Days of Accounting Year/[Cost of Goods sold/average inv) or =Days of Accounting year x [Average Invetory/cost of goods sold]	It shows in how many days average inventory is sold and converted into receivable during the accounting period.
e	**Receivable Turnover Ratio/Receivable Collection Period:**	
	In times:	
	Receivable Turnover Ratio(Times): Net Credit Sales/Average Receivable Average Receivable = (Beginning Receivable + Ending Receivable)/ 2	It shows how many times the average receivable is converted into cash during the accounting period.
	In Days	
	Receivable Turnover(Days) = Days of Accounting Year/Receivable Turnover-in times Or Receivable Turnover(Days)=Days of Accounting Year/[Net Credit Sales/average Receivable) or =Days of Accounting year x [Average Receivable/Net Credit Sales]	It shows in how many days average receivable is converted into cash during the accounting period.
f	**Days of Operating Cycle:**	
	Days of Operating Cycle: Inventory Turnover Days + Receivable Turnover Days	It shows in how many days inventory is sold and receivable is converted into cash.

g	**Payment Turnover Ratio/Payable Payment Period:**	
	In times:	
	Payable Turnover Ratio(Times): Net Credit Purchases/Average Payable Average Payable = (Beginning Payable + Ending Payable)/ 2	It shows how many times the average payable is paid during the accounting period.
	In Days	
	Payable Turnover(Days) = Days of Accounting Year/Payable Turnover-in times Or Payable Turnover(Days)=Days of Accounting Year/[Net Credit Puchases/average Payable) or =Days of Accounting year x [Average Payable/Net Credit Purchases]	It shows in how many days average payable is paid during the accounting period.

8. Comparative balance sheets of CPA Company are given below:

CPA COMPNAY LTD. BALANCE SHEET

ASSETS	31.12.18	31.12.17
Cash	23,000	16,000
A/c. Receivable	18,000	10,000
Inventory	34,000	30,000
Plant Assets	56,000	55,000
Accumulated Depreciation	(12,000)	(10,000)
Total	119,000	101,000
LIA. & Shareholder Equity	31.12.18	31.12.17
Accounts Payable	20,700	18,200
Wages Payable	800	300
Income Tax Payable	500	1,500
Ordinary Share Capital	60,000	50,000
Retained Earning	37,000	31,000
Total	119,000	101,000

Income Statement of CPA Co. for the year 2018 is given below:

CPA Co. Ltd., Income statement for the year ended Dec.31,18.		
Sales		59,000
Less: Cost of Goods sold		30,000
Gross Profit		29,000
Less: Expenses		
Wages Expense	10,000	
Depreciation Expense	5,000	
Other Operating Expenses	3,000	
Income Tax Expenses	2,000	20,000
Net Income		9,000

Assume that during 2018 following transaction took place, In addition to routine transaction: (1) Purchased new plant assets for Rs.8,000.

(2) Issued additional Ordinary Shares at par for Rs.10,000.

(3) Declared and paid cash dividends of Rs.3,000.

(4) Sold plant asset (having book value Rs.4,000 and accumulated depreciation Rs.3,000) for Rs.4,000 cash.

Computation for Working Capital

		2018		2017
Cash		23,000		16,000
Accounts Receivable		18,000		10,000
Inventory		34,000		30,000
Total Current Assets		**75,000**		**56,000**
Less:Current Liabilities:				
Accounts Payable	20,700		18,200	
Wages Payable	800		300	
Income Tax Payable	500	(22,000)	1,500	(20,000)
Working Capital		**53,000**		**36,000**

Conclusion:

Working capital in 2018 has increased by Rs.17,000.

Computation for Current Ratio

Current Ratio = Current Assets / Current Liabilities

	2018	2017
Current Assets	75,000	56,000
Current Liabilities	22,000	20,000
Current Ratio	**3.41**	**2.80**

Conclusion:

Current ratio of 2018 is greater than current ratio of 2017(3.41 >2.80.This shows that short term solvency of the firm has increased.

Computation for Quick Ratio

Quick/Acid-Test Ratio: [Current Assets - (Inventory + Supplies + Prepaid Expense)] / Current Liability

	2018	2017
Current Asset	75,000	56,000
Less:Inventory	(34,000)	(30,000)
Quick Assets	41,000	26,000
Current Liabilities	22,000	20,000
Quick Ratio	**1.86**	**1.30**

Conclusion:

Quick ratio of 2018 is greater than quick ratio of 2017(1.86 >1.30.This shows that short term solvency of the firm has increased.

Computation for Inventory Turnover in Days	
Inventory Turnover(Days) = Days of Accounting Period x (Average Inventory/Cost of Goods Sold)	
Average Inventory= (30000 +34000) / 2	32,000
Cost of Goods Sold	30,000
Inventory Turnover(Days)= 365 x (32000/30000)	389
Conclusion:	
Since inventory turnover(in days) is 389, it means that the average inventory of Rs.32,000 takes 389 days to be converted into accounts receivable.	
Computation for Receivable Turnover in Days	
Receivable Turnover(Days) = Days of Accounting Period x (Average Receivable/Net Credit Sales)	
Average Receivable= (18000 +10000) / 2	14,000
Net Credit Sales	59,000
Receivable Turnover(Days)= 365 x (14000/59000)	87
Conclusion:	
Since receivable turnover(in days) is 87, it means that the average receivable of Rs.14,000 takes 87 days to be converted into cash.	

Computation for Days of Operating Cycle

Days of Operating Cycle: Inventory Turnover Days + Receivable Turnover Days

Inventory Turnover Days	389
Receivable Turnover Days	87
Days of Operating Cycle	476

Conclusion:

Since days of operating cycle are 476, it shows that it takes 47 days to sell inventory and convert receivable into cash.

Computation for Payable Turnover in Days

Payable Turnover(Days) = Days of Accounting Period x (Average Payable/Net Credit Purchases)

First we find 'Net Credit Purchases:	
Cost of Goods Sold	30,000
Add:Increase in Inventory	4,000
Net Credit Purchases	34,000
Average Payable=(18200 + 20700)/2	19,450
Payable Turnover Days(365 x 19450/34000)	209