

RATIO ANALYSIS- III BCOM- FA-VI

Formula to calculate ratio:

1.Current Ratio	Current assets/ current liabilities x 100
2.Liquid Ratio (Quick ratio/Acid test ratio)	Liquid assets/ liquid liabilities x 100 Liquid assets= Current assets- (stock & prepaid expenses) Liquid liabilities= current liabilities- Bank overdraft
3. Stock turnover ratio	Cost of goods sold/average stock x 100 Cost of goods sold= Opening stock+ Purchases+Direct expenses- closing stock (sales-gross profit) Average stock= opening stock+ closing stock/2
4. Gross profit ratio:	Gross profit/ Net sales x 100
5. Net profit Ratio:	Net profit after tax/ Net sales x 100
6. Debt Equity Ratio:	Long term debts/ shareholders' funds x 100 Shareholders funds= Equity capital+ preference capital+ reserves and surplus – Fictitious assets.
7. Capital gearing ratio:	Equity shareholders' funds/ fixed interest-bearing funds x 100. Equity shareholders' funds= Equity capital+ reserves and surplus. Fixed Interest bearing funds= Preference capital debentures+ Long term loan.
8. Debtors turnover ratio:	Net credit sales/Average debtors x 100 Total sales/closing debtors x 100
9. creditors turnover ratio:	Net credit purchases/ average accounts payable x100 (creditors +bills payable)
10. Proprietary ratio	Shareholders funds / Total assets x 100.
11. operating ratio:	Cost of goods sold + operating expenses / net sales x 100 Operating expenses= administration + distribution and selling expenses.
12. working capital ratio:	Current assets/ current liabilities x 100

1) Following is the Balance sheet of X limited as at 31 march 2021:

Liabilities	Amount ₹	Assets	Amount ₹
Equity share capital	2,00,000	Plant & machinery	2,00,000
10% Preference share capital	1,00,000	Land and building	2,00,000
20% debentures	1,00,000	Stock	1,50,000
Reserves and surplus	1,00,000	Debtors	50,000
Loan (Long term)	50,000	Cash	1,00,000
Creditors	1,00,000		
Bank overdraft	50,000		
	7,00,000		7,00,000

Compute the following ratios:

- 1) Current ratio 2) liquid ratio 3) proprietary ratio 4) Debt equity ratio
- 5) Capital gearing ratio.

1) Current ratio= Current assets/current liabilitiesx100

$$CA= 1,50,000+50,000+1,00,000=3,00,000 \text{ Stock+cash+debtors}$$

$$CL= 1,00,000+ 50,000=1,50,000 \text{ Creditors +BOD}$$

$$3,00,000/1,50,000 \times 100= 2: 1 \text{ OR } 200\%$$

2) Liquid ratio= liquid assets/liquid liabilities x100

$$\text{Liquid assets}= 50,000+1,00,000 = 1,50,000 \text{ debtors and cash}$$

$$\text{Liquid liabilities}= 1,00,000= \text{creditors}$$

$$1,50,000/1,00,000 \times 100= 3:2 \text{ or } 150\%$$

3) Proprietary ratio= shareholders fund/total assetsx100

$$\text{Shareholders fund}= \text{ESC}+\text{PSC}+\text{R\&S}$$

$$2,00,000+1,00,000+1,00,000=4,00,000$$

$$\text{Total assets}= 7,00,000$$

$$4,00,000/7,00,000 \times 100= 4:7 \text{ or } 57.14\%$$

4) Debt and equity ratio= long term debt/ shareholders fund x100

$$\text{Long term debt}= \text{debentures}+ \text{long term loan}$$

$$1,00,000+50,000=1,50,000$$

$$\text{Shareholders fund}= \text{ESC}+\text{PSC}+\text{R\&S}= 4,00,000$$

$$1,50,000/4,00,000 \times 100= 3:8 \text{ OR } 37.5\%$$

5) Capital gearing ratio= equity shareholders fund/fixed interest bearing fundsx100

$$\text{ESP}= \text{ESC}+\text{R\&S} \ 2,00,000+1,00,000= 3,00,000$$

Fixed int bearing fund= PSC+Debentures+long term loan
 $1,00,000+1,00,000+50,000= 2,50,000$
 $3,00,000/2,50,000 \times 100= 6:5$ or 120%.

2) following is the balance sheet of a company as on 31 march 2021:

Liabilities	Amount ₹	Assets	Amount ₹
Share capital	2,00,000	Land and building	1,40,000
Profit and loss account	30,000	Plant and machinery	3,50,000
General reserve	40,000	Stock	2,00,000
12% debentures	4,20,000	Debtors	1,00,000
Creditors	1,00,000	Bills receivables	10,000
Bills payable	50,000	Cash at bank	40,000
	8,40,000		8,40,000

Compute: 1) current ratio 2) quick ratio 3) debt to equity ratio 4) proprietary ratio 5) capital gearing ratio.

Current ratio= current assets/current liabilities $\times 100$

CA= Stock+debtors+B/R+Cash $2,00,000+1,00,000+10,000+40,000=3,50,000$

CL= creditors +B/P $1,00,000+50,000=1,50,000$

$3,50,000/1,50,000 \times 100= 7:3$ OR 233.33%

Quick ratio= liquid assets/liquid liabilities $\times 100$

LA= Debtors+B/R+Cash $1,00,000+10,000+40,000=1,50,000$

LL= Creditors +B/P $1,00,000+50,000=1,50,000$

$1,50,000/1,50,000 \times 100= 1:1$ OR 100%

Debt equity ratio= long term debt/shareholders fund $\times 100$

Long term debt= 12% debentures 4,20,000

Shareholders fund= Sc+PL+GR $2,00,000+30,000+40,000=2,70,000$

$4,20,000/2,70,000 \times 100= 14:9$ OR 155.55%

Proprietary ratio= shareholders fund/total assets x100

Shareholders fund= 2,70,000

Total assets= 8,40,000

$2,70,000/8,40,000 \times 100 = 9:28$ or 32.14%

Capital gearing ratio= equity shareholders fund/fixed interest bearing fundsx100

ESH Fund= share capital+PL+GR 2,00,000+30,000+40,000=2,70,000

Fixed int bearing fund= 12% debentures 4,20,000

$2,70,000/4,20,000 \times 100 = 9:14$ or 64.29%

3)following is the Balance sheet of the company as on 31 march 2021:

Liabilities	Amount	Assets	Amount
ESC	2,00,000	Building and Land	1,90,000
6% PSC	1,00,000	Plant & machinery	3,50,000
Profit and loss account	30,000	Stock	2,00,000
General reserve	40,000	Debtors	1,00,000
12% debentures	4,20,000	Bills receivables	20,000
Creditors	1,00,000	Marketable securities	20,000
Bills payable	50,000	Cash at bank	60,000
	9,40,000		9,40,000

Calculate:

- 1) Current ratio
- 2) quick ratio
- 3) debt equity ratio
- 4) proprietary ratio
- 5) capital gearing ratio.

Current ratio= current assets/current liabilitiesx100

CA= Stock+debtors+B/R+MS+Cash

$2,00,000+1,00,000+20,000+20,000+60,000 = 4,00,000$

CL= creditors +B/P $1,00,000+50,000=1,50,000$

$4,00,000/1,50,000 \times 100 = 8:3$ OR 266.67%

Quick ratio= Liquid assets/liquid liabilitiesx100

Liquid assets= debtors+BR+MS+Cash

$1,00,000+20,000+20,000+60,000=2,00,000$

Liquid liabilities = creditors+B/P $1,00,000+50,000=1,50,000$

$$2,00,000/1,50,000 \times 100 = 4:3 \text{ OR } 133.33\%$$

Debt equity ratio = long term debt/shareholders fund $\times 100$

Long term debt = debentures 4,20,000

Shareholders fund = ESC + PSC + PL + GR

$$2,00,000 + 1,00,000 + 30,000 + 40,000 = 3,70,000$$

$$4,20,000/3,70,000 \times 100 = 42:37 \text{ OR } 113.51\%$$

Proprietary ratio = shareholders fund/total assets $\times 100$

Shareholders fund = 3,70,000

Total assets = 9,40,000

$$3,70,000/9,40,000 \times 100 = 37:94 \text{ or } 39.36\%$$

Capital gearing ratio = Equity shareholders fund/fixed interest bearing funds $\times 100$

ESH Fund = ESC + PL + GR 2,00,000 + 30,000 + 40,000 = 2,70,000

Fixed int bearing fund = debentures + PSC 4,20,000 + 1,00,000 = 5,20,000

$$2,70,000/5,20,000 \times 100 = 27:52 \text{ OR } 51.92\%$$

4) following is the summarized balance sheet of ABC limited as on 31 march 2021:

Liabilities	Amount ₹	Assets	Amount ₹
ESC	2,50,000	Goodwill	20,000
6% PSC	1,50,000	Building	2,50,000
General reserve	20,000	Machinery	1,75,000
Profit and loss account	15,000	Furniture	10,000
5% debentures	1,00,000	Stock	90,000
Bills payable	12,000	Debtors	21,000
Creditors	28,000	Bank	5,000
		Preliminary expenses	4,000
	5,75,000		5,75,000

Additional information:

- Total sales 4,00,000 of which 20% is made on credit.
- Gross profit for the year amounted to 80,000 and net profit 20,000.

Calculate:

1. Current ratio
2. Liquid ratio
3. Debt equity ratio
4. Gross profit ratio
5. Net profit ratio
6. Proprietary ratio.

Current ratio= current assets/current liabilities \times 100

$$CA= \text{Stock}+\text{debtors}+\text{bank } 90,000+21,000+5,000=1,16,000$$

$$CL= \text{B/P}+\text{Creditors } 12,000+28,000= 40,000$$

$$1,16,000/40,000 \times 100= 290\% \text{ or } 29:10$$

Liquid ratio= Liquid assets/liquid liabilities \times 100

$$LA= \text{Debtors}+\text{bank } 21,000+5,000= 26,000$$

$$LL= \text{Creditors } +\text{BP } 12,000+28,000=40,000$$

$$26,000/40,000 \times 100= 65\% \text{ or } 13:20$$

Debt equity ratio= long term debt/shareholders fund \times 100

$$\text{Long term debt}= \text{debentures } 1,00,000$$

$$\text{SHF}= \text{ESC}+\text{PSC}+\text{PL}+\text{GR}- \text{P exp } 2,50,000+1,50,000+20,000+15,000-4,000=4,31,000$$

$$1,00,000/4,31,000 \times 100= 23.20\% \text{ or } 1:4.31$$

Gross profit ratio= gross profit/net sales \times 100

$$80,000/4,00,000 \times 100= 20\% \text{ or } 1:5$$

Net profit ratio= net profit/sales \times 100

$$20,000/4,00,000 \times 100= 5\% \text{ or } 1:20$$

Proprietary ratio= shareholders fund/ total assets \times 100

$$\text{SHF}= 4,31,000$$

$$\text{TA}= 5,75,000-4,000=5,71,000$$

$$4,31,000/5,71,000 \times 100= 75.48\% \text{ or } 43.1: 57.1$$

5) from the given data, calculate:

1) Gross profit ratio 2) net profit ratio 3) inventory turnover ratio 4) working capital ratio 5) quick ratio 6) proprietary ratio. ₹

Sales	25,20,000
Cost of sales	19,20,000
Net profit	3,60,000
Inventory	8,00,000
Other current assets	7,60,000
Fixed assets	14,40,000
Net worth	15,00,000
Debt	9,00,000
Current liabilities	6,00,000

Gross profit ratio= gross profit /sales x100

GP= Sales- cost of sales 25,20,000- 19,20,000= 6,00,000

$6,00,000/25,20,000 \times 100 = 23.81\%$ or 10:42

Net profit ratio= net profit/salesx100 $3,60,000/25,20,000 \times 100 = 14.29\%$ or 1:7

Stock turnover ratio= cost of goods sold/avg stock x100

$19,20,000/8,00,000 \times 100 = 240\%$ or 24:1

Working capital ratio= CA/CL X100

CA= Inventory+other CA 8,00,000+7,60,000= 15,60,000

CL= 6,00,000

$15,60,000/6,00,000 \times 100 = 260\%$ OR 13:5

Quick ratio= LA/LLX100

LA= Other current assets 7,60,000

LL= CL 6,00,000

$7,60,000/6,00,000 \times 100 = 126.67\%$ OR 19:15

Proprietary ratio= Shareholders fund/total assetsX100

SHF= Networth 15,00,000

TA= FA+Inventory+other current assets 14,40,000+8,00,000+7,60,000= 30,00,000

$15,00,000/30,00,000 \times 100 = 50\%$ OR 1:2

6) The following are the summarized profit and loss account and Balance sheet of Bharath limited.

Profit and loss account

To opening stock	1,00,000	By sales	8,00,000
To purchases	6,00,000	By closing stock	2,00,000
To gross profit	3,00,000		
	10,00,000		10,00,000
To operating expenses	2,00,000	By gross profit	3,00,000
To non- operating expenses	10,000		
To net profit	90,000		
	3,00,000		3,00,000

Balance Sheet

Liabilities	Amount ₹	Assets	Amount ₹
25,000 equity shares of 10 each	2,50,000	Land and building	1,30,000
Reserves	70,000	Plant and machinery	1,30,000
Profit and loss account	60,000	Stock	1,20,000
Bills payable	20,000	Debtors	95,000
Creditors	1,00,000	Cash	25,000
	5,00,000		5,00,000

Calculate 1) current ratio 2) operating ratio 3) stock turnover ratio 4) net profit ratio 5) proprietary ratio 6) gross profit ratio.

Current ratio= current assets/current liabilities x100

CA= Stock+debtors+cash 1,20,000+95,000+25,000= 2,40,000

CL= BP+creditors 20,000+1,00,000=120000

2,40,000/1,20,000x100= 200% or 2:1

Operating ratio= cost of goods sold+operating exp/salesx100

Cost of goods sold= sales- gross profit 8,00,000- 3,00,000=5,00,000

Operating exp= 2,00,000

5,00,000+ 2,00,000= 7,00,000= 7,00,000/8,00,000x100= 87.5% or 7:8

Stock turnover ratio= cost of goods sold/ avg inventory x100

Avg inventory= opening stock+ closing stock/2

=1,00,000+2,00,000=3,00,000/2=1,50,000

5,00,000/1,50,000x100= 333.33% or 10:3

Net profit ratio= net profit/salesx100

90,000/8,00,000x100= 11.25% or 9:80

Proprietary ratio= shareholders fund/total assetsx100

SHF= ESC+P/L+Reserves 2,50,000+70,000+60,000=3,80,000

TA= 5,00,000

3,80,000/5,00,000X100= 76% OR 19:25

Gross profit ratio= GP/SALESX100

3,00,000/8,00,000x100= 37.5% or 3:8

7) the following are the summarized profit and loss account of ABC Limited for the year ending 31 march 2021 and the Balance sheet as on that date:

Particulars	Amount ₹	Particulars	Amount ₹
To opening stock	99,500	By sales	8,50,000
To purchases	5,45,250	By closing stock	1,49,000
To incidental expenses	14,250		
To gross profit	3,40,000		

	9,99,000		9,99,000
To operating expenses: Selling and distribution exp Administration expenses Financial expenses	30,000 1,50,000 15,000	By gross profit	3,40,000
To non- operating expenses: - Loss on sale of shares	4,000	By non- operating income: Interest 3,000 Profit on sale of shares 6,000	9,000
To net profit	1,50,000		
	3,49,000		3,49,000

Balance Sheet as on 31-03-2021

Liabilities	Amount ₹	Assets	Amount ₹
ESC of Rs 10 each	2,00,000	Land and building	1,50,000
Reserves	90,000	Plant and machinery	80,000
Current liabilities	1,30,000	Stock	1,49,000
Profit and loss a/c	60,000	Debtors	71,000
		Cash and bank	30,000
	4,80,000		4,80,000

You are required to calculate:

- 1) Gross profit ratio
- 2) Net profit ratio
- 3) Operating ratio
- 4) Current ratio
- 5) Acid test ratio
- 6) Proprietary ratio.

Gross profit ratio= $\frac{\text{gross profit}}{\text{sales}} \times 100$

$$3,40,000/8,50,000 \times 100 = 40\% \text{ or } 2:5$$

Net profit ratio= $\frac{\text{net profit}}{\text{sales}} \times 100$

$$1,50,000/8,50,000 \times 100 = 17.65\% \text{ or } 3:17$$

Operating ratio= $\frac{\text{cost of goods sold} + \text{operating exp}}{\text{sales}} \times 100$

Cost of goods sold= sales- gross profit= 8,50,000-3,40,000=5,10,000

Operating exp= selling and d + administration+ finance exp=
30,000+1,50,000+15,000= 195000

$$5,10,000+195000 = 7,05,000/850000 \times 100 = 82.94\% \text{ or } 141:170$$

Current ratio= current assets/current liabilitiesx100

CA= stock+ debtors+ cash = 1,49,000+71,000+30,000=250000

CL= 1,30,000

$2,50,000/1,30,000 \times 100 = 192.31\%$ OR 25:13

Acid test ratio= Liquid assets/liquid liabilities x100

LA= debtors +cash 71,000+30,000= 101000

LL= 1,30,000

$1,01,000/1,30,000 \times 100 = 77.69\%$ OR 10.1 :13

Proprietary ratio= shareholders fund/total assetsx100

SHF= ESC+P/L+Reserves 2,00,000+60,000+90,000= 3,50,000

TA= 4,80,000

$3,50,000/4,80,000 \times 100 = 72.92\%$ or 3.5:4.8

8) calculate the following ratios for the years 2020 and 2021 using the figures made available:

1) liquidity ratio 2) current ratio 3) debt equity ratio 4) proprietary ratio 5) stock turnover ratio 6) capital gearing ratio.

Balance sheet as at 31 march

Liabilities	2020 ₹	2021 ₹	Assets	2020 ₹	2021 ₹
Paid up capital	1,00,000	1,00,000	Fixed assets	2,17,200	2,19,810
Reserves and surplus	67,250	84,500	Stock	56,160	49,460
Debentures	1,00,000	1,00,000	Debtors	11,260	11,710

Bills payable	12,750	6,500	Cash	15,380	26,020
Creditors	20,000	16,000			
	3,00,000	3,07,000		3,00,000	3,07,000

Cost of goods sold for 2020 and 2021 ₹ 1,80,000 and ₹ 1,95,000 respectively.

1. Liquid ratio= liquid assets/ liquid liabilitiesx100

$$2020=LA= \text{debtors}+ \text{cash } 11,260+ 15380= 26,640$$

$$LL= B/P+ \text{Creditors } 12,750+ 20,000= 32,750$$

$$26,640/32,750 \times 100=81.34\% \text{ or } 0.81:1$$

$$2021= LA= 11,710+ 26,020= 37,730$$

$$LL= 6,500+16000= 22500$$

$$37,730/22500 \times 100= 167.69\% \text{ OR } 1.68:1$$

2 . Current ratio= current assets/ current liabilities x100

$$2020 \text{ CA}= \text{Stock}+ \text{debtors}+ \text{cash } 56160+ 11260+15380= 82,800$$

$$CL= BP+\text{Crs } 12,750+ 20,000= 32,750$$

$$82800/ 32,750 \times 100= 252.82\% \text{ or } 2.53:1$$

$$2021= 49,460+ 11,710+ 26020= 87190 \text{ CA}$$

$$6500+ 16000= 22500 \text{ CL}$$

$$87190/22500 \times 100= 387.51\% \text{ OR } 3.88:1$$

3 Debt equity ratio= long term debt/ shareholders fundx100

$$2020= LTD= \text{debentures } 1,00,000$$

$$SHF= SC+\text{R\&S } 1,00,000+ 67,250= 167250$$

$$1,00,000/ 167250 \times 100= 59.79\% \text{ OR } 0.58:1$$

$$2021= LTD = \text{Debentures } 1,00,000$$

$$SHF= 1,00,000+ 84500= 184500$$

$$1,00,000/184500 \times 100=54.20 \text{ OR } 0.54:1$$

4. Proprietary ratio= shareholders fund/total assets.

$$2020= SHF= 1,67,250 \quad TA= 3,00,000$$

$$1,67,250/3,00,000 \times 100= 55.75\% \text{ OR } 0.56:1$$

$$2021= SHF= 184500 \quad TA= 307000$$

$$1,84,500/3,07,000 \times 100= 60.09\% \text{ OR } 0.6:1$$

5. Stock turnover ratio= cost of goods sold/avg stock x100

$$2020= COGS= 1,80,000 \quad \text{Avg stock}=56160$$

$$1,80,000/56,160 \times 100= 320.51\% \text{ or } 3.2:1$$

$$2021= COGS= 195000 \quad \text{Avg stock } (56,160+ 49460/2) 52,810$$

$$195000 / 52,810 \times 100 = 369.25\% \text{ or } 3.7:1$$

6. capital gearing ratio = equity shareholders fund / fixed int bearing fund $\times 100$

$$2020 = \text{ESF} = 1,67,250 / 1,00,000 \times 100 = 167.25\% \text{ OR } 1.67:1$$

$$2021 = \text{ESF } 1,84,500 / 1,00,000 \times 100 = 184.5\% \text{ OR } 1.84:1$$

9) from the following statement of gold limited for the year ended 31 march 2021, you are required to compute the following ratio:

1) current ratio 2) liquid ratio 3) operating ratio 4) stock turnover ratio 5) gross profit ratio 6) net profit ratio.

Balance sheet as on 31-03-2021

Liabilities	Amount ₹	Assets	Amount ₹
1,00,000 Equity shares of ₹ 5 each	5,00,000	Land and building	3,50,000
General reserve	3,00,000	Plant and machinery	2,50,000
Profit and loss account	2,00,000	Stock	3,00,000
Creditors	2,00,000	Debtors	2,00,000
		Cash at bank	1,00,000
	12,00,000		12,00,000

Profit and loss account for the year ending 31-03-2021

Particulars	Amount ₹	Particulars	Amount ₹
To opening stock	1,00,000	By sales	16,00,000
To purchases	8,00,000	By closing stock	2,00,000
To gross profit	9,00,000		
	18,00,000		18,00,000
To office and administration expenses	2,00,000	By gross profit	9,00,000
To selling and distribution	1,00,000	By profit on sale of assets	25,000
To other expenses	25,000		
To net profit	6,00,000		
	9,25,000		9,25,000

- 1) Current ratio= current assets/current liabilities x100
CA= Stock+ debtors+cash 3,00,000+2,00,000+1,00,000= 6,00,000
CL= creditors 2,00,000
 $6,00,000/2,00,000 \times 100 = 300\%$ or 3:1
- 2) Liquid ratio= liquid assets/ liquid liabilities x100
LA= debtors + cash 2,00,000+1,00,000=3,00,000
LL= creditors 2,00,000
 $3,00,000/2,00,000 \times 100 = 150\%$ or 3:2
- 3) Operating ratio= cost of goods sold+ operating exp/ net sales x100
Cost of goods sold= sales – gross profit
 $16,00,000 - 9,00,000 = 7,00,000$
Operating exp= office & adm exp+ selling exp+ other expenses
 $2,00,000 + 1,00,000 + 25,000 = 3,25,000$
 $7,00,000 + 3,25,000 = 10,25,000 / 16,00,000 \times 100 = 64.1\%$ or 0.64:1
- 4) Stock turnover ratio= cost of goods sold/ avg stock x100
COGS= Sales – GP $16,00,000 - 9,00,000 = 7,00,000$
Avg stock= o.stock+ c.stock/2 $1,00,000 + 2,00,000 = 3,00,000 / 2 = 1,50,000$
 $7,00,000 / 1,50,000 \times 100 = 466.67\%$ or 4.67:1
- 5) Gross profit ratio= gross profit/sales x100
 $9,00,000 / 16,00,000 \times 100 = 56.25\%$ or 0.56:1
- 6) Net profit ratio= net profit/ sales x100
 $6,00,000 / 16,00,000 \times 100 = 37.5\%$ or 0.38:1

10) From the following financial statement of Star limited.

Calculate:

- 1) Liquid ratio 2) working capital ratio 3) operating ratio 4) proprietary ratio 5) debt equity ratio 6) net profit ratio 7) stock turnover ratio 8) capital gearing ratio.

Profit and loss account for the year ending 31-03-2021.

Particulars	Amount ₹	Particulars	Amount ₹
To opening stock	5,00,000	By sales	20,00,000
To purchases	11,00,000	By closing stock	6,00,000
To manufacturing expenses	5,00,000		
To gross profit	5,00,000		
	26,00,000		26,00,000
To administrative exp	75,000	By gross profit	5,00,000
To selling expenses	50,000	By dividend investment	10,000
To debenture interest	20,000	By profit on sale of furniture	20,000
To depreciation	60,000		
To loss on sale of motor car	5,000		
To net profit	3,20,000		
	5,30,000		5,30,000
To provision for taxation	1,76,000	By balance B/F	2,56,000
To balance C/F	4,00,000	By net profit	3,20,000
	5,76,000		5,76,000

Balance sheet as on 31 march 2021

Liabilities	Amount ₹	Assets	Amount ₹
Equity share capital	10,00,000	Goodwill	5,00,000
6% preference share capital	5,00,000	Land and building	7,00,000
General reserve	1,00,000	Plant and machinery	6,00,000

Profit and loss account	4,00,000	Furniture	1,00,000
10% debentures	2,00,000	Stock	6,00,000
Provision for Tax	1,76,000	Bills receivable	30,000
Bank overdraft	2,00,000	Debtors	1,50,000
Creditors	2,00,000	Cash and bank	2,20,000
Bills payable	1,24,000		
Total	29,00,000		29,00,000

Liquid ratio= Liquid assets/ liquid liabilities x100

LA= B/R+ debtors+ cash and bank

$$30,000+ 1,50,000+2,20,000= 4,00,000$$

LL= B/P+ creditors+ taxation provision 1,24,000+2,00,000+ 1,76,000= 5,00,000

$$4,00,000/5,00,000 \times 100 = 80\% \text{ or } 0.8:1$$

Working capital ratio= Current assets/ current liabilities x100

CA= B/R+ debtors+ cash and bank+ stock 30,000+

$$150000+2,20,000+6,00,000= 10,00,000$$

CL= B/P+ Creditors+ tax provision+ Bank overdraft 1,24,000+ 2,00,000+1,76,000+ 2,00,000= 7,00,000

$$10,00,000/7,00,000 \times 100 = 142.86\% \text{ or } 1.43:1$$

Operating ratio= cost of goods sold+ operating exp/ net salesx100

Cost of goods sold= sales – gross profit 20,00,000- 5,00,000= 15,00,000

Operating exp= Adm exp+ selling exp+ depreciation+ deb int

$$75,000+ 50,000+ 60,000+ 20,000= 2,05,000$$

$$15,00,000+ 2,05,000= 17,05,000/ 20,00,000 \times 100 = 85.25\% \text{ or } 0.9:1$$

Proprietary ratio= shareholders funds/ total assets x100

SHF= ESC+ PSC+GR+P/L 10,00,000+5,00,000+1,00,000+ 4,00,000=20,00,000

TA= 29,00,000

$$20,00,000/29,00,000 \times 100 = 68.97\% \text{ OR } 0.69:1$$

Debt equity ratio= long term debt/ shareholders fundx100

Long term debt= 10% deb 2,00,000

SHF= 20,00,000

$$2,00,000/20,00,000 \times 100 = 10\% \text{ OR } 0.1:1$$

Net profit ratio= net profit after tax/net sales x100

NP after tax= 3,20,000- 1,76,000= 1,44,000/20,00,000x100= 7.2% or 0.07:1

Stock turnover ratio= cost of goods sold/ avg stock x100

COGS= 15,00,000

Avg stock= ostock+ cstock/2 5,00,000+6,00,000/2= 5,50,000

15,00,000/5,50,000x100= 272.73% or 2.73:1

Capital gearing ratio= Equity shareholders fund/ fixed int bearing funds

ESF= ESC+ GR+P/L 10,00,000+1,00,000+ 4,00,000=15,00,000

Fixed int bearing fund= PSC+Debentures 5,00,000+2,00,000= 7,00,000

15,00,000/7,00,000x100 = 214.29% or 2.14:1

11) from the following information find out:

a) current assets b) liquid assets c) inventory

current ratio 2.5:1 acid test ratio 1.5:1 current liability ₹4,00,000

CR= CA/CLX100

2.5:1 CL= 4,00,000

CA= 4,00,000X2.5= 10,00,000

LR= LA/LLX100

LA= 1.5:1 LL= 4,00,000

LA= 4,00,000X1.5= 6,00,000

Inventory= CA-LA 10,00,000-6,00,000=4,00,000

12) Granthik limited has a current ratio of 4.5:1 and quick ratio of 3:1. if its inventory is ₹ 72,000. find out its total current assets and total current liabilities.

CR=CA/CL 4.5:1

QR= LA/LL 3:1

CA-LA 4.5-3=1.5 = 72,000 Inventory

72,000/1.5= 48,000 CL= 48,000

CA= 48,000X4.5= 2,16,000

13) current liabilities of a company are ₹ 3,00,000 its current ratio is 3:1 and quick ratio is 1:1 calculate the value of stock in trade, current assets and liquid assets.

$$CR = CA/CL \text{ 3:1}$$

$$CL = 3,00,000 \times 3 = 9,00,000 \text{ CA.}$$

$$QR = QA/QL \text{ 1:1 } CL/QL = 3,00,000$$

$$QA = 3,00,000$$

$$\text{Stock} = CA - LA \text{ 9,00,000} - 3,00,000 = 6,00,000 \text{ Stock.}$$

14) the following information of xyz limited is given below.

Current ratio 2.5:1 Acid test ratio 1.5:1 working capital ₹60,000 bank overdraft ₹10,000.

Find out a) current assets b) current liabilities c) liquid assets d) stock.

$$WC = CA - CL = \text{Networking capital } 2.5:1$$

$$2.5 - 1 = 1.5 = 60,000$$

$$CA = 1,00,000 \text{ CL} = 40,000 \text{ CA} - LA = \text{Stock } 2.5 - 1.5 = 1 \text{ Stock} = 40,000$$

$$LA = CA - \text{Stock } 1,00,000 - 40,000 = 60,000$$