

Q NO 7):

Given Data

Year	Project	Remaining
out flow, 0	-150,000	
1	50,000	-100,000
2	56,000	-44,000
3	64,000	20,000
4	68,000	
5	72,000	

re or $i = 13\%$

To be find

pay back Period = PP = ?

Net Present value = NPV = ?

Profitability index = PI = ?

Solve

Payback Period = PP = complete + $\frac{\text{Remaining out flow}}{\text{next year out flow}}$

$$= 2 + \frac{44,000}{64,000}$$

$$= 2 + 0.6875$$

very good attempt but
plz improve your
presentation.

$$PP = 2.6875 \text{ year}$$

$$NPV = PV_{\text{inflow}} - PV_{\text{outflow}}$$

$$= \frac{50000}{(1+13\%)^1} + \frac{56000}{(1+13\%)^2} + \frac{64000}{(1+13\%)^3} + \frac{68000}{(1+13\%)^4} + \frac{72000}{(1+13\%)^5} - 150000$$

$$NPV = 213243.6011 - 150000$$

$$NPV = \$ 63243.60114$$

very good

$$PI = 1 + \frac{NPV}{\text{initial outflow}}$$

$$= 1 + \frac{63243.60114}{150000}$$

$$= 1 + 0.4216$$

good

$$PI = 1.42$$

Q NO 29

Account Receivable (A/R)

As per Given information we will use formula of average collection Period

$$\text{Average collection Period} = 40 \text{ days}$$

$$\text{Average collection Period} = \frac{365}{\text{A/R Turnover}}$$

$$= \frac{365}{\frac{\text{Sale}}{\text{A/R}}}$$

$$= 365 \times \frac{\text{A/R}}{\text{Sale}}$$

$$40 = \frac{365 \times \text{A/R}}{1800,000}$$

$$40 \times 1800000 = 365 \times \text{A/R}$$

$$18000,000 = 365 \times \text{A/R}$$

$$\frac{18000000}{365} = \text{A/R}$$

$$A/R = 197260.274$$

very good too..
numerical part is very
good

$$\begin{aligned} \text{Account Receivable} &= \text{Rs } 197260.274 \\ &\approx \text{Rs } 197260 \end{aligned}$$

Inventory

AS per given information we calculate inventory through inventory turnover formula

$$\text{inventory Turnover} = \frac{\text{COGS}}{\text{inventory}}$$

$$\text{COGS} = \text{Sale} - \text{Gross Profit}$$

$$\frac{\text{Gross Profit}}{\text{Sale}} = \text{Gross Profit margin}$$

$$\text{Gross Profit margin} = \frac{\text{Gross Profit}}{\text{Sale}}$$

$$25\% = \frac{\text{Gross Profit}}{1800,000}$$

$$\text{Gross Profit} = 25\% \times 1800,000$$

Gross Profit = Rs. 450,000

$$\text{COGS} = 1800,000 - 450,000$$

COGS = Rs. 1350,000

Put in inventory turnover formula

$$\text{Inventory Turnover} = \frac{\text{COGS}}{\text{Inventory}}$$

$$\text{Turnover } 6 = \frac{1350000}{\text{Inventory}}$$

$$\text{Inventory} = \frac{1350000}{6}$$

good

Inventory = Rs. 225,000

Total Current Asset

$$\text{T.C.A} = \text{Cash} + \text{Marketable Securities} + \text{A/R} + \text{Inventory}$$

$$\text{T.C.A} = 32720 + 25000 + 197260 + 225000$$

$$\text{Total C.A} = \text{RS } 479980$$

method is correct

Total Asset =

$$\text{Asset Turnover} = \frac{\text{Sale}}{\text{Total Asset}}$$

$$1.20 = \frac{1800,000}{\text{Total Asset}}$$

$$\text{Total Asset} = \frac{1800,000}{1.20}$$

$$\text{Total Asset} = \text{RS. } 1500000$$

v good

Fixed Asset:-

$$\begin{aligned} \text{Fixed Asset} &= \text{Total Asset} - \text{C.A} \\ &= 1500,000 - 479980 \end{aligned}$$

$$\text{Fixed Asset} = \text{RS } 1020020$$

Current liability:-

use current Ratio

$$\text{current Ratio} = \frac{\text{C.A}}{\text{C.L}}$$

$$1.6 = \frac{479980}{\text{C.L}}$$

$$\text{C.L} = \frac{479980}{1.6}$$

very good

$$\text{C.L} = 299987.5$$

$$\text{C.L} = 299988$$

Notes Payables (NP)

very good

$$\text{C.L} = \text{A/P} + \text{NP} + \text{Accruals}$$

$$299988 = 120000 + \text{NP} + 20,000$$

$$\text{NP} = 299988 - 120000 - 20000$$

$$\text{NP} = \text{Rs } 159988$$

$$\text{Total Asset} = \text{Total liabilities} + \text{Equity}$$

$$1500,000 = \text{Total liabilities} + 600,000$$

$$1500,000 - 600,000 = \text{Total liabilities}$$

$$\text{Rs } 900,000 = \text{Total liabilities}$$

Long Term debt

$$\begin{aligned} \text{Total liabilities} &= \text{C.R} + \text{Long Term debt} \\ 900,000 &= 299988 + \text{Long Term debt} \end{aligned}$$

$$\text{Long Term debt} = -299988 + 900000$$

$$\text{Long Term debt} = \text{Rs } 600012$$

ABC Industries

Balance Sheet ending Dec 31, 2020

Asset	Rs	Liabilities and equity	Rs
Cash	32,720	Accounts Payable	12,000
Marketable Securities	25,000	Notes Payable	159,988
Account receivable	197,260	Accruals	20,000
Inventory	225,000	Total current liability	299,988
Total current Asset	479,980	Long Term debt	60,000
Net fixed Asset	1,020,020	Stockholder's equity	600,000
Total Asset	1,500,000	Total liabilities and equity	1,500,000

this balance sheet needs to be prepared in the start of the question .

Toor you are very good in numbers . please concentrate in theory part.