HW - Chapter 6 - Leverages - Q9

1.

(i)   P/V Ratio and Earning per share (EPS)

Operating leverage =   Contribution(C) ÷ Contribution - Fixed Cost (FC)

2	=	$C \div C - 3,40,000$
Or, C	=	$2 (C - 3,40,000)$
Or, C	=	$2C - 6,80,000$
Or, Contribution	= Rs. 6,80,000	

Now, P/V ratio   = Contribution (C) ÷ Sales × 100 = 6,80,000 ÷ 50,00,000 × 100 = 13.6%

EBT   = Sales – Variable Cost – Fixed Cost – Interest

       = Rs.50,00,000 – Rs.50,00,000 (1-0.136) – Rs.3,40,000 – (8% × Rs.30,25,000)

       = Rs. 50,00,000 – Rs. 43,20,000 – Rs. 3,40,000 – Rs. 2,42,000

       = Rs. 98,000

PAT   = EBT(1-T)= Rs. 98,000(1-0.3) = Rs. 68,600

EPS   = Rs. 68,600 ÷ 3,40,000 shares = Rs. 0.202

(ii)   Assets turnover

Assets turnover = Sales ÷ Total Assets * = Rs. 50,00,000 ÷ (Rs. 34,00,000 +Rs. 30,25,000) = 0 .78

0.78 < 1.5 means lower than industry turnover.

*Total Asset = Equity share capital + 8% Debentures

(iii)   Required sales when EBT is zero = Fixed Cost + Interest + desired Profit ÷ P/V Ratio

= Rs. 3,40,000 + Rs. 2,42,000 + zero ÷ 13.60% = = Rs. 42,79,412

[Note: The question can also be solved by first calculating EBIT with the help of Financial Leverage. Accordingly answer to the requirement (ii) and (iv) will also vary]