

HW - Chapter 10 - Working Capital - Q1

1. Raw Material Storage Period (R)

= Average Stock of Raw Material \div Annual Consumption of Raw Material \times 365

= $(Rs.45+Rs.65) / 2 \div 380 \times 365 = 52.83$ or 53 days

Annual Consumption of Raw Material = Opening Stock + Purchases - Closing Stock

= Rs.45 + Rs.400 - Rs.65 = Rs.380 lakh

2. WIP Conversion Period (W)

= Average Stock of WIP \div Annual Cost of Production \times 365

= $(Rs.35+Rs.51)/2 \div 450 \times 365 = 34.87$ or 35 days

3. Finished Stock Storage Period (F)

= Average Stock of Finished Goods \div Cost of Goods Sold \times 365

= $(Rs.60+Rs.70)/2 \div 525 \times 365 = 45.19$ or 45 days.

4. Receivables (Debtors) Collection Period (D)

= Average Receivables \div Annual Credit Sales \times 365

= $(Rs.112+Rs.135)/2 \div 585 = 77.05$ or 77 days

5. Payables (Creditors) Payment Period (C)

= Average Payables for materials \div Annual Credit purchases \times 365

= $(Rs.68+Rs.71)/2 \div 400 \times 365 = 63.41$ or 64 days

(i) Net Operating Cycle Period

= $R + W + F + D - C = 53 + 35 + 45 + 77 - 64 = 146$ days

(ii) Number of Operating Cycles in the Year

= $365 \div 146 = 2.5$ times

(iii) Amount of Working Capital Required

= Annual Operating Cost \div Number of Operating Cycles = $Rs.325 \div 2.48 = Rs. 130$ lakh