Working Capital Management

1. From the following information, extracted from the books of a manufacturing company, compute the operating cycle in days and the amount of working capital required:

Period covered-365 days

Average period of credit allowed by suppliers-16 days

Average Total of Debtors Outstanding-₹4,80,000

Raw Material Consumption-₹44,00,000

Total Production Cost- ₹1,00,00,000

Total Cost of Sales- ₹1,05,00,000

Sales for the year- ₹1,60,00,000

Value of Average Stock maintained:

Raw Material- ₹3,20,000

Work-in-progress- ₹3,50,000

2. Information of Alisa Ltd., is given below:

Profit and Loss Account Information

Particulars	Amount (₹)
Sales	1,600
Cost of Goods Sold	1,440

Balance Sheet Information

Particulars	Opening Balance (₹)	Closing Balance (₹)
Stock (Inventory)	190	200
Bills Receivable	160	180
Bills Payable	110	130

Calculate the Inventory Holding Period, Bills Receivable Period, Bills Payable Period, Cash Cycle, and Operating Cycle based on the above information.

3. Using the following information, calculate the Operating Cycle and Cash Cycle of X Ltd.

Particulars	Amount (₹ '000)

Particulars	Amount (₹ '000)
Annual Sales	1,095
Purchase of Raw Materials	300
Direct Labour Cost	200
Other Manufacturing Expenses	230
Selling Expenses	70
Opening Stock of Raw Materials	30
Closing Stock of Raw Materials	40
Opening Work-in-Progress (WIP)	35
Closing Work-in-Progress (WIP)	45
Opening Stock of Finished Goods	40
Closing Stock of Finished Goods	60
Opening Debtors	100
Closing Debtors	120
Opening Creditors	30
Closing Creditors	50

Calculate the Operating Cycle and the Cash Cycle of X Ltd. using the above information.

4. From the following information extracted from the books of a manufacturing company, compute the Net Operating Cycle. Assume a 365-day year.

Annual Sales (All Credit): ₹60,00,000

- Cost of Goods Sold (COGS): ₹45,00,000
- Annual Raw Material Purchases (Credit): ₹24,00,000
- Annual Raw Material Consumption: ₹22,00,000
- Annual Cost of Production: ₹40,00,000

Average Inventory Levels maintained:

- Raw Materials: ₹2,20,000
- Work-in-Progress (WIP): ₹1,64,380
- Finished Goods: ₹3,69,860
- Average Debtors: ₹6,00,000
- Average Creditors: ₹2,00,000

5. Using the following information of a company, calculate the Operating Cycle and Cash Cycle.

Particulars	Amount (₹)
Credit Sales	7,000
Credit Purchase of Raw Materials	5,000
Direct Labour	300
Other Manufacturing Expenses	400
Selling, Administrative and Other Expenses	200
Opening Stock of Raw Materials	400
Closing Stock of Raw Materials	500
Opening Work-in-Progress (WIP)	200
Closing Work-in-Progress (WIP)	300
Opening Stock of Finished Goods	320
Closing Stock of Finished Goods	240
Opening Debtors	600
Closing Debtors	760
Opening Bills Receivable	400
Closing Bills Receivable	500
Depreciation	80

6. XYZ Ltd. sells its products at a Gross Profit of 20% on sales. The following operational forecasts are provided for the upcoming financial year:

Annual Sales (at 3 months' credit to debtors): ₹40,00,000

- Raw Materials Consumption: ₹12,00,000
- Direct Wages (paid 15 days in arrears): ₹9,60,000
- Manufacturing Expenses (paid 1 month in arrears): ₹12,00,000
- Administrative Expenses (paid 1 month in arrears): ₹4,80,000
- Sales Promotion Expenses (paid half-yearly in advance): ₹2,00,000 [1]

Additional Information:

1. Raw Materials Stock: Maintained at 2 months' consumption level.
2. Finished Goods Stock: Maintained at 1.5 months' cost of production level.
3. Work-in-Progress (WIP): Assume a processing time of 1 month (Raw materials are fully issued at the start; Wages and Manufacturing overheads accrue evenly over the cycle).

4. Suppliers Credit: Creditors extend 1 month's credit period.
5. Precautionary Cash Balance: ₹1,00,000.
6. Safety Contingency Margin: 10% cushion factor.

Compute the total Working Capital Requirements.

7. A company provides for a contingency reserve at 10% of the required working capital. Based on the following information, prepare a statement showing the Net Working Capital Requirement.

Particulars	Amount (₹)
Sales	25,00,000
Less: Cost of Goods Sold	15,30,000
Gross Profit	9,70,000
Less: Operating Expenses	1,50,000
Less: Selling Expenses	1,20,000
Profit Before Tax	7,00,000
Less: Provision for Taxation	2,00,000
Profit After Tax	5,00,000

Details Included in Cost of Goods Sold

Particulars	Amount (₹)
Material Consumed	9,00,000
Add: Labour and Manufacturing Expenses	5,50,000
Add: Depreciation	2,50,000
Cost of Production	17,00,000
Less: Closing Stock (10% of Production)	1,70,000
Cost of Goods Sold	15,30,000

Additional Information

1. The above details do not include Work-in-Progress (WIP), which is equal to 10% of the annual production units. The degree of completion of WIP is 40% with respect to conversion costs (labour and other manufacturing expenses).
2. The stock holding period is 2 months.
3. The time lag for expenses is 1 month.
4. The credit period allowed by creditors is 2 months.

5. 20% of total sales are cash sales, and the remaining 80% are credit sales with a collection period of 3 months.

6. 70% of the tax liability has been paid in advance for 3 months.

7. The company maintains a contingency reserve equal to 10% of the required working capital.

8. The following information is available for a company's affairs of last 12 months period.

Sales	Rs. 38,40,000
Selling price per unit	Rs. 20
Variable cost per unit	Rs. 14
Total cost per unit	Rs. 18
Present collection period	01 Month

Company wants to adopt liberal credit standards. As a result average collection period will increase to 2 months. Sales will increase by 25%. Assume 25% as cost of capital. Should the company liberalise the credit terms?

9. The following information is available of Amar Co. Ltd. of last year:

Sales Units – 60,000
Variable Cost (Per Unit) – 28
Total Cost (Per Unit) – 31
Selling Price (Per Unit) – 35
Present Collection Period – 75 days
Collection Expenses – 15,000
Bad debts – 3.5%
Rate of Return – 20%
Company wants to adopt following Strict credit Standards
Collection Period – 30 days

10. Krishna Ltd gives you the following information for the year 2025-26.

a) Sales (1,56,000 units) (25% Cash sales and 75% credit sales)- ₹.93,60,000
b) Cost of raw material is 60% of selling price
c) Wages per unit-₹6
d) Variable overhead costs per unit-₹1
e) Fixed overhead cost - Rs.10,00,000 (Including depreciation of ₹2,20,000
f) Estimated stock level:

Raw material-3 weeks

Work-in-progress-1 week

(Material 100%, Wages and overhead 50%)
Finished goods-2 weeks
g) Credit allowed to debtors is- 4 weeks
h) Credit allowed by creditors is-4 weeks
i) Payment period for overhead costs-2 weeks
j) Duration of payment of labour-2 weeks
k) Cash on hand requirement-Rs.1,00,000
Prepare statement showing the working capital requirement. Assume 52 weeks for a year and 4 weeks for a month. Debtors consider on sales cost.
11. A Performa cost sheet of company is given below:

Particulars	Per unit (₹)
Raw Materials	180.00
Direct Labour	67.50
Overheads	135.00
Total cost (per unit)	382.50
Profit	67.50
Selling price	450.00

The following is the additional information available.

1) Raw material are in stock on an average for one month.
2) Material are in process on an average for 1/2 month.
3) Finish goods are in stock on an average for 1 month.
4) Credit allowed by suppliers is 1 month.
5) Credit allowed to debtors is 2 months.
6) Lag in payment of wages is 1 ½ weeks. While lag in payment of overhead is 1 month.
7) One fourth of the output is sold against cash.
8) Cash on hand and bank balance is expected to be Rs. 75,000.

You are required to prepare statement showing the working capital need to finance a level of activity of 1,45,600 units of output.
You may assume that production is carried on evenly throughout the year wages and overheads accrue similarly. Assume 52 weeks for a year. Four weeks time period is equal to one month.

12. Based on the following information of Reliance Ltd., prepare a statement showing the Net Working Capital Requirement.

Particulars	Amount (₹)
Average stock of finished goods	15,000
Average stock of raw materials	25,000

Particulars	Amount (₹)
Domestic sales – credit period 6 months	9,36,000
Exports – credit period 2 months	2,40,000
Average time lag for payment of wages	7,80,000
Wages outstanding for 1 month	1,50,000
Stock of materials, etc. outstanding for 1 month	20,000
Rent outstanding for 6 months	1,25,000
Clerical staff salaries outstanding for ½ month	15,000
Manager's salary outstanding for ½ month	1,50,000
Outstanding miscellaneous expenses for 2 months	—
Prepaid miscellaneous expenses for 3 months	24,000
Add a provision of 15% for contingencies	—

Additional amounts relating to outstanding expenses:

- Wages: ₹7,80,000
- Materials, etc.: ₹1,50,000
- Rent: ₹20,000
- Clerical staff salaries: ₹1,25,000
- Manager's salary: ₹15,000
- Miscellaneous expenses: ₹1,50,000

Prepaid Expenses:

- Miscellaneous expenses (3 months): ₹24,000

Prepare a statement showing the Net Working Capital Requirement, including a 15% provision for contingencies.