

## Assignment - Set - II

1. Describe briefly the components, needs, and sources of Working Capital.

Working Capital is the life blood of any business, ensuring its day-to-day operations running smoothly of a business. No business can run successfully without an adequate amount of working capital.

### Components:

1. Cash: Beyond immediate liquidity needs, cash reserves act as a buffer against unforeseen expenses or opportunities. It ensures the company can seize favorable circumstances or weather unexpected downturns without disruption.
2. Accounts Receivable: Amounts owed to the company by customers for goods or services delivered on credit terms. Managing accounts receivable efficiently is vital to ensure timely cash inflows.
3. Inventory: Inventory consists of raw materials, work-in-progress, and finished goods. It ensures smooth production and timely delivery of products to customers.
4. Accounts Payable: These represent amounts owed by the company to its suppliers for purchases made on credit. Managing accounts payable effectively helps maintain good relationships with the ~~minimization~~ <sup>optimization</sup> of ~~ex~~ suppliers and optimize cash flow.

## Needs

- Operating expenses: Working Capital is vital for meeting ongoing operational costs, but it's equally essential to have reserves for contingencies or strategic investments.
- Inventory management: Beyond ensuring availability, working capital supports strategies like just-in-time inventory to reduce carrying cost or improve efficiency.
- Accounts Receivable management:  
It's essential to have working capital to bridge the gap b/w the time of sale and the collection of receivable, ensuring cash flow continuity.
- Seasonal fluctuations:  
Businesses may require additional working capital during peak seasons to manage increased demand and inventory levels.

## Sources

- Short-term loans: While helpful for bridging short-term gaps, companies need to evaluate the cost of borrowing against the benefits of maintaining liquidity and financial flexibility.
- Trade credit: Suppliers may provide favorable payment terms, allowing the company to defer payment for goods or services received, thus freeing up working capital.
- Retained earnings: Profits retained within the company from previous periods can be reinvested to fund current working capital requirements.



Equity financing: Issuing additional shares or seeking equity investments from investors can inject capital into the business to support working capital.

2. A firm with a required rate of return of 10 percent is considering a project that requires an initial outlay of RS 20,000 and the cash inflow are given as follows:

Year	1	2	3	4	5
Cash inflow (RS)	3,000	4,000	6,000	5,000	4,000

Calculate the payback, and NPV and suggest whether the project is acceptable or not.

A discount rate of 10% to be used. Present value at 10% rate are 0.909, 0.826, 0.751, 0.683, 0.621

Sol. To calculate the payback period, we sum up the cash inflow until they equal or exceed the initial investment RS 20,000

Year	Cash inflow (RS)	NPV	Cash inflow * NPV
1	3000	0.909	2,727
2	4000	0.826	3,304
3	6000	0.751	4,506
4	5000	0.683	3,415
5	4000	0.621	2,484
	22,000		16,436

$$\text{NPV} = 16,436 - 20,000$$

$$= -3,564$$

$$\text{Cash inflow} = 22,000$$

$$\text{Payback period} = 4 \text{ years} + (2000 / 4000)$$

$$= 4 \text{ years} + 0.5 \text{ years} = 4.5 \text{ years}$$

Conclusion: the project is not acceptable.

3. Write a note on the payback period in capital budgeting.

The payback period is defined as the number of years required for the proposal's cumulative cash inflows to be equal to its cash outflows. In other words, the payback period is the length of time required to recover the initial cost of the project.

The payback period therefore, can be looked upon as the length of time required for a proposal to 'break even' on its net investment.

Calculation of the payback period.

The payback period can be calculated in two different situations.

1. When Annual Inflows are Equal.
2. When Annual cash inflows are unequal.

1. When Annual Inflows are Equal:-

When the cash inflows being generated by a proposal are equal per time period i.e., the cash inflows are in the form of an annuity the payback period can be computed by dividing the cash outflow by the amount of annuity.

2. When the Annual cash inflows are unequal:

In case the cash inflows from the proposal are not in annuity form then the cumulative cash inflows are raised to compute the payback period.

$$\text{Payback period} = \frac{\text{original Cost of the investment}}{\text{Annual cash inflow}}$$



- The formula for calculating the payback period is

$$\text{Payback period} = \frac{\text{initial investment}}{\text{Annual cash inflows}}$$

- Project with shorter payback periods are generally considered more desirable as they offer a quicker return on investment and lower risk.

- However, the payback period does not consider the time value of money, ignores cash flows beyond the payback period, and does not account for profitability.

- Therefore, it should be used in conjunction with other capital budgeting techniques for a comprehensive analysis.

- When Annual Inflows are equal

$$\text{payback period} = \frac{\text{original investment of the project}}{\text{Annual cash flow and the project}}$$

- Merits:
1. It is a traditional and old method
  2. It involves simple calculation
  3. Selection or rejection of the project can be made easily.
  4. The results obtained under this method are more reliable
  5. It is the best method for evaluating high-risk projects.

- Demerits:
1. It is based on the principle of "rule of thumb".
  2. It does not recognize the importance of "time value of money".
  3. It does not consider the profitability of economic life of the project.

4. What is a cash book? State the format of various types of cash books.

A cash book is a financial journal used by businesses to record all cash transactions, including both receipts and payments, in chronological order. It serves as a primary record of a company's cash and bank transactions, providing an accurate account of its liquidity.

Various types of cash books:

1. Single column cash book (or) Simple cash book.
2. Cash Book with Discount column (or) double column cash book.
3. Cash Book with Bank and Discount column (or) triple column cash book.

1. Single Column cash book:-

- This format records only cash transactions without differentiating between cash receipts and cash payment.
- It consists of columns for date, particulars (description of transaction) and amount, ledger folio.
- It is commonly used by small businesses or those with straightforward cash transactions.

Date	Particulars	Amount	ledger folio.
01-Jan-22	opening balance	10,000	LF1
02-Jan-22	Sales	5,000	LF2
3-Jan-22	Rent paid	2,000	LF3
4-Jan-22	Cash deposited	3,000	LF4.



## 2. Double Column cash book:

- This format has separate columns for recording cash receipts and cash payment.
- It includes columns for date, particulars (description or transaction), cash received, cash paid, and ledger folio.

Date	Particular	Cash received (RS)	Cash paid (RS)	Ledger folio
01-Jan-2022	opening balance	10,000	-	LF1
02-Jan-2022	Sales	5,000	-	LF2
03-Jan-2022	Rent received	2,000	-	LF3
04-Jan-2022	Rent paid		2000	LF4

## 3. Triple Column Cash book:

- This format includes an additional column for discounts.
- It includes columns for date, particulars, cash received, cash paid, discount and ledger folio.

Date	Particular	Cash received (RS)	Cash Paid (RS)	Discount (RS)	Ledger folio
01-Jan-2022	opening balance	10,000	-	-	LF1
02-Jan-2022	Sales	5,000	-	-	LF2
03-Jan-2022	Purchase discount	3,000	-	-	LF3
04-Jan-2022	Cash deposited		500	50	LF4

5. From the following information, prepare the Trading account for the year ending 31<sup>st</sup> March, 2006:

Adjusted / Net purchases = RS. 12,00,000

Sales = RS. 13,50,000

Closing stock = RS. 85,000

Freight and Carriage inwards = RS. 10,000.

Wages = RS. 5000

Freight and Carriage outwards = RS. 2,000

Sol. - to prepare the trading account for the year ending 31<sup>st</sup> March 2006.

Adjusted / Net purchases = RS 12,00,000

Sales = RS = 13,50,000

Freight and Carriage inwards = RS. 10,000

Wages = RS = 5000

Freight and Carriage outwards = RS. 2,000.

Closing stock = 85,000.

Debit		Credit	
Particular	Amount	Particular	Amount
Sales	13,50,000	Total Cost of Goods Available for Sales	12,10,000
Less: Cost of Goods sold			
Opening stock	<del>XXXXXX</del>		
Add: purchase	12,00,000	Less: closing stock	85,000.
Freight and carriage inwards	10,000		
Cost of Goods solds.	11,25,000		11,25,000
Gross Profit	2,25,000		



1. Total Cost of Goods Available for Sale:  
= opening Stock + Adjusted purchases + Freight and carriage inwards.

$$= \text{xxxxx} + 12,00,000 + 10,000 \\ = 12,10,000$$

2. Cost of Goods Sold:  
= Total Cost of Goods available for sale - closing stock

$$= 12,10,000 - 85,000 \\ = 11,25,000.$$

3. Sales Gross profit:  
= Sales - Cost of Goods sold.  
= 13,50,000 - 11,25,000  
= 2,25,000.