

Managerial Economics & Accountancy

Assignment Set II

- (1) Describe briefly the components, needs, and sources of working capital.

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

Components of Working Capital:-

- (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 suppliers and optimize cash flow.

Needs of Working Capital:-

- (1) Operating Expenses:- Working Capital is vital for meeting ongoing operational costs, but it's equally essential to have reserves for contingencies ~~for~~ strategic investments.
- (2) Inventory Management:- beyond ensuring availability working capital supports strategies like just-in-time inventory to reduce carrying cost or improve efficiency.
- (3) 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 the cash flow continuity.
- (4) Seasonal fluctuations:- Businesses may require additional working capital during peak seasons to manage increased demand and inventory levels.

Sources of Working Capital:-

- (1) Short-term Loans:- while useful for bridging short-term gaps, companies need to evaluate the cost of borrowing against the benefits of maintaining liquidity and financial flexibility.
- (2) Trade Credit:- suppliers may provide favorable payment terms, allowing the company to defer payment for goods or services received, thus freeing up working capital.

(3) Retained Earning:- profits, retained with in the company from previous periods can be re-invested to fund current working capital requirement.

(4) Equity financing:- issuing additional shares or seeking equity investments from investor can inject capital into the bussiness to support working capital.

- (2.) A firm with a required rate of Return of 10% is considering a project that requires an initial outlay of Rs 20,000 and the Cash inflow are given as follows-

Years	1.	2	3	4	5
Cash inflow (Rs)	3,000	4,000	6,000	5,000	4,000

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

A discount rate of 10% to be used. present value at 10% rate ~~and~~ 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

$$\begin{aligned} \text{NPV} &= 16,436 - 20,000 \\ &= -3,564 \end{aligned}$$

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

$$\begin{aligned} \text{Payback Period} &= 4 \text{ years} + (2000/4000) \\ &= 4 \text{ years} + 0.5 \text{ years} = 4.5 \text{ years} \end{aligned}$$

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 others 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 of '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 inflow 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~~ outflow by the amount of annuity.

$$\text{Payback Period} = \frac{\text{original investment of the Project}}{\text{Annual cash flow and the Project.}}$$

- 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.

(Q2) 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 project period.

$$\text{Pay back Period} = \frac{\text{original cost of the investment}}{\text{Annual cash inflow}}$$

The formula for calculating the payback period is:

$$\text{Payback Period} = \frac{\text{Initial Investment}}{\text{Annual Cash inflows.}}$$

- Project with shorter payback period 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.

(4.) what is a cash book? state the format of various types of cashbooks.

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.

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 transaction without differentiating b/w cash receipts and cash payment
- It consists of column for date, particulars (description of transaction) and ~~by~~ amount, ledger folio.
- it is commonly used by small businesses or those with straight forward cash transactions.

Date	Particulars	Amount	Ledger folio.
01-Jan-22	opening balance	10,000	LF 1
02-Jan-22	Sales	5,000	LF 2
03-Jan-22	Rent Paid	2,000	LF 3
04-Jan-22	Cash deposited	3,000	LF 4

(2) Double Column Cash book:-

- This format has separate columns for recording cash receipts and cash payment.
- it includes column for date, particular (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	—	LF 1
03-Jan-2022	Rent received	2,000	—	LF 3
02-Jan-2022	Sales	5,000	—	LF 2
04-Jan-2022	Rent Paid	—	2,000	LF 4

(3) Triple Column Cash book:-

- this format includes an additional column for discount.
- 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	—	—	LF 1
02-Jan-2022	Sales	5,000	—	—	LF 2
03-Jan-2022	Purchase discount	3,000	—	—	LF 3
04-Jan-2022	cash deposited	—	500	50	LF 4

(5)

From the following information, prepare the trading account for the year ending 31st 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. 5,000

Freight and Carriage outwards : Rs. 2,000

Sol.

To prepare the following trading account for the year ending 31st 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. 5,000

Freight and Carriage outwards = Rs. 2,000

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	xxxxx		
Add: Purchase	12,00,000	Less: closing stock	85,000
Freight and Carriage in wards	10,000		
cost of goods sold	11,25,000		11,25,000
Gross profit	2,25,000		

Ex: (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) Gross profit:-

= sales - cost of goods sold

$$= 13,50,000 - 11,25,000$$

$$= 2,25,000/-$$

Gross profit is: 2,25,000 ₹/-