بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيم

Diploma in Islamic Banking Examination, Sep-Oct'2021
Part-II
Course 201: Investment Management

Text: **1 .BRPD Circular No-04 Dated 08.03.2016 - Guidelines on Credit Risk Management(CRM).**
2. Guidelines on Internal Credit Risk Rating System (ICRRS) for Banks
3. BRPD Circular no-14 dated 23.09.2012 –Master Circular: Loan Classification and Provisioning.
4. BRPD Circular no-15 dated 23.09.2012 –Master Circular on Loan Rescheduling.

Investment mechanism:

Investment: Investment is the use of money for the purpose of making more money to gain income or increase in capital or both."

Definition of Mechanism:"An organized set of doctrines, ideas or principles usually intended to explain the arrangement or working of a systematic whole."

Mechanism of Islamic banking: There are 3 mechanism of investment:

A. Bai Mechanism
B. Share Mechanism &
C. Ijara Mechanism

A. Bai Mechanism
i. Bai-Murabaha
ii. Bai-Muajjal
iii. Bai-Salam
iv. Bai-Istisna
v. Bai As-sarf

B. Ijara Mechanism:
i. Ijara
ii. Hire purchase under shirkatul Milk (HPSM)

C. Share Mechanism:
i. Mudararba
ii. Musharaka

Modes of Investment:

(i) **Bai Muajjal**: Bai-Muajjal may be defined as a contract between-a Buyer and a Seller under which the seller sales certain specific goods (permissible under shariah And law of the land) to the buyer at an agreed fixed price payable at a certain fixed future date in lump sum or by instalments within a fixed period.

ii) **Bai Murabaha**: Bai-Murabaha may be defined as a contract between a Buyer and a Seller under which the seller sells certain specific goods (permissible under Islamic Shari'ah and the law of the land) to the buyer at a cost plus agreed profit payable in cash or on any fixed future date in lump sum or by instalments within a fixed period.

(iii) **Bai Salam:** Bai-Salam may be defined as a contract between a Buyer and a Seller under which the Seller sells in advance the certain commodity (ies)/product(s) [permissible under Islamic Shariah and the law of the land] to the Buyer at an agreed price payable on execution of the said contract and the commodity(ies)/product(s) will be delivered as per specification, size, quality, quantity at a future time in a particular place.

(iv**) Bai Istisna**: Istisna'a is a contract between a manufacturer/seller and a buyer under which the manufacturer/seller sells specific product(s) (permissible under Islamic Shari'ah and Law of the Country) after having manufactured at an agreed price payable in advance or by instalments within a fixed period or on/within a fixed future date on the basis of the order placed by the buyer.

(v) **Bai As Sarf**: Bai` al-sarf refers to a contract of exchange of money for money of the same or different type.Money is a medium of exchange that shall be in the form of currency, gold, silver, or other forms accepted by Shariah.For purposes of this policy document, bai` al-sarf refers to a contract of exchange of the same or different currency..

(vi) **Mudaraba**: The term refers to a form of business contract in which one party capital and the other personal effort. The proportionate share in profit is determined by mutual agreement. But the loss, if any, is borne only by the owner of the capital, in which case the entrepreneur gets nothing for his labour. The financier is known as 'Saheb-al-maal' and the entrepreneur as 'mudarib'.

(vii) **Musharaka** : The word 'Musharaka' is derived from Arabic word 'Sharika' meaning partnership. It is an agreement under which bank provides capital which are mingled with the funds of the business enterprise and others. All the providers of capital are entitled to participate in the management but not necessarily required to do so. The profit is distributed among the partners in pre-determined ratio, while the loss is born by each partner in proportion to his contribution of funds.

(viii) **Ijara:** Ijarah has been defined as a contract between two parties, the Hiree and Hirer, where the Hirer enjoys or reaps a specific service or benefit against a specified consideration or rent from the asset owned by the Hiree. It is a hire agreement under which a certain asset is hired out by the Hiree to a Hirer against fixed rent or rentals for a specified period.

(ix) **Hire Purchase under Shirkatul Melk:** In HPSM (Bai bil Ijarah) bank participate in the form equity jointly with the client for purchase of an asset as per agreement, lease out the asset to the client against rent and client gradually pays back the bank investment in installments within stipulated time as per agreement.

Hire Purchase under Shirkatul Melk is a synthesis of three contracts:

1. Shirkat
2. Ijarah and
3. Sale

Specialized Investment Schemes of IBBL :

1. Household Durables Scheme
2. Housing Investment Scheme
3. Housing Investment Program
4. Transport Investment Scheme
5. Car Investment Scheme
6. Investment Scheme for Doctors
7. Small Business Investment Scheme
8. Agricultural Implements Investment Scheme
9. Rural Development Scheme
10. Palli Griho Nirman Prokalpa
11. Micro Industries Investment Scheme
12. SMEs Investment Scheme
13. SME Women Entrepreneurs Investment Scheme
14. NRB Investment Scheme
15. Urban Poor Development Scheme
16. Solar Panel Investment Scheme
17. Fruit Gardening Investment Scheme
18. Freelancer Investment Scheme
19. Work Order Financing Scheme
20. Light Engineering Investment Scheme
21. Rural Transport Investment Scheme
22. Cluster Investment Scheme

IBBL's Goal through Special Investment Schemes :

1. Welfare investment schemes for the poor and fixed income group.
2. To finance for poverty alleviation and employment generation.
3. Finance to the rural poor & Businessmen without collateral security.
4. To take different efforts to develop life-style of less-income groups.
5. To extend health care facilities to maximum people.

Criteria for selecting a good investment client:

1. Man is the main factor for investment. Importance is to be given on the man than the securities.
2. Must be a good & honest businessman.
3. Firm commitment
4. Capability to generate income.
5. Integrity and honesty must be undisputed.
6. He must have good reputation in the society for his commitments, dealings /behaviors
7. Permanent business establishment
8. Must be within bank's command area
9. Sufficient experience in the related line of trade.
10. Past performance must be verified.

11. He should deal in such commodities which have social & public utility and Shariah permissibility.
12. The investment must be directed towards the benefit of the society the people and not harmful in any way e.g. drugs, wines, cigarettes, tobacco etc.
13. Fast moving items should be given preference
14. Slow moving items should be given discouraged
15. Nepotism, favoritism, personal relationship must not get any consideration while selecting clients.

5-Cs:

a) Character (Human factor, Experience, Succession, Lifestyle etc.)
b) Capacity (Performance, Profitability, Liquidity, Solvency etc.)
c) Capital (Financial factor)
d) Condition (Internal & External factor)
e) Collateral (Location, Value, Stability)

5-R(s):

a) Reliability: Dependability, financial strength, etc.
b) Responsibility: Commitment, moral accountability, trustworthy, etc.
c) Resources: Assets / securities / equity
d) Reputation: Character, Goodwill in the society, market, product, etc
e) Repayment: Past performance, Account conduct, Credit transaction turnover, sales volume, cash flow position, income / business

Project Appraisal:

What is a project appraisal and why it is required ?

Project Appraisal is a consistent process of reviewing a given project and evaluating its content to approve or reject this project, through analyzing the problems or need to be addressed by the project, generating solution options (alternatives) for solving the problem, selecting the most feasible option, conducting a feasibility analysis of that option, creating the solution statement and identifying all people and organizations concerned with or affected by the project and its expected outcomes. It is an attempt to justify the project through analysis, which is a way to determine project feasibility and cost-effectiveness.

Need for project appraisal	:
Entrepreneur's point of view	: To ensure profitability.
Banker's point of view	: To ensure repayment of banks finance.
National point of view	: Optimum utilization of resources and achievement of national objective.

Definition Of Project:

- A Project is a scheme or part of scheme for investing resources (Human/Finance) with a view to produce goods or services.
- A Project is a temporary endeavor undertaken to accomplish a unique purpose.
- A Project is a unique set of coordinated activities

with a definite starting and finishing point, undertaken by an individual or organization to meet specific objectives within defined schedule, cost and performance parameters.

Different Aspects of Project Appraisal:

01. Management aspects
02. Technical aspects
03. Marketing aspects
04.Financial aspects
05. Socio-economic aspects

Mnaagement Aspects:

1. Board of Directors
2. Chairman
3. Managing Director
4. Successor
5. Management Competence
6. Education
7. Business Experience

Technical Aspect:

1. Project location.
2. Technical know how
3. Civil Engineering, construction, structure, Layout plan for building & machinery
4. Project implementation Period
5. Human resources requirements.
6. Choice of technical process/ Erecting/ Installation/ commissioning.
7. Project timing & scheduling.
8. Alternative uses of the project.
9. Provision and expansion.
10. Utility (power, gas, water etc.) transportation & disposal, ETP (Effluent Treatment Plant).
11. Product mix or Bi-Product.
12. Raw materials (sources & price).

Marketing Aspects:

The principal types of information required for market and demand analysis are:

1. Demand analysis- effective demand in the past and present
2. Supply analysis- past and present supply position with supply gap
3. Import and exports
4. Structure of competition
5. Elasticity of demand
6. Consumer behavior, Intension, Motivation, attitudes
7. Marketing strategies. (Dumping/ penetrate/Branding)
8. Product pricing and price statistics
9. Breakdown of demand

Financial Aspect:

1. Cost of the project/ operating cost.
2. Means of finance and Debt-Equity ratio
3. Assessment of Working Capital requirement
4. Sourcing, timing/plans and cost of fund
5. Sales estimate Financial Budget.
6. Financial statement
7. Financial viability. (BEP, NPV, IRR, PBP)
8. Sensitivity analysis.
9. Level of risk involved

Socio-economic Aspects:

1.Externalities and social cost-benefit Analysis of the project
2.Foreign exchange earnings/saving
3.Contribution to employment generation
4.Contribution to GDP
5.Backward and forward linkage
6.Opportunity Cost
7.Shadow Prices
8.Income Distribution
9.Self Reliance
10.Development of Samall Industrries
11 .Improvement of Life Style

Internal Credit Risk Rating(ICRR)

Components of Internal Credit Risk Rating(ICRR):

In the previous version of Credit Risk Grading Manual, 50 percent weights were assigned for quantitative indicators (financial risk) while 50 percent weights were for subjective judgment (qualitative). In the ICRR, these weights have been revised; 60 percent weights are assigned for quantitative indicators while 40 percent are assigned for qualitative indicators.

1. Quantitative indicators :

   Quantitative indicators in ICRR fall into six broad categories: leverage, liquidity, profitability, coverage, operational efficiency and earning quality.

2. Qualitative indicators :

   Qualitative indicators cover six broad aspects of the firms/institutions to be rated, namely business/industry risk, credit quality enhancement, performance behavior, management risk, relationship risk and compliance risk.

Rules of Classification, Declassification, Provisioning, Rescheduling, Write off and Waiver:

Four categories for the purpose of classification:

1) Continuous Investment – The investment Accounts in which transactions may be made within certain limit and have an expiry date for full adjustment will be treated as Continuous investments. Examples are: Bai -murabaha, Bai- muajjal etc.

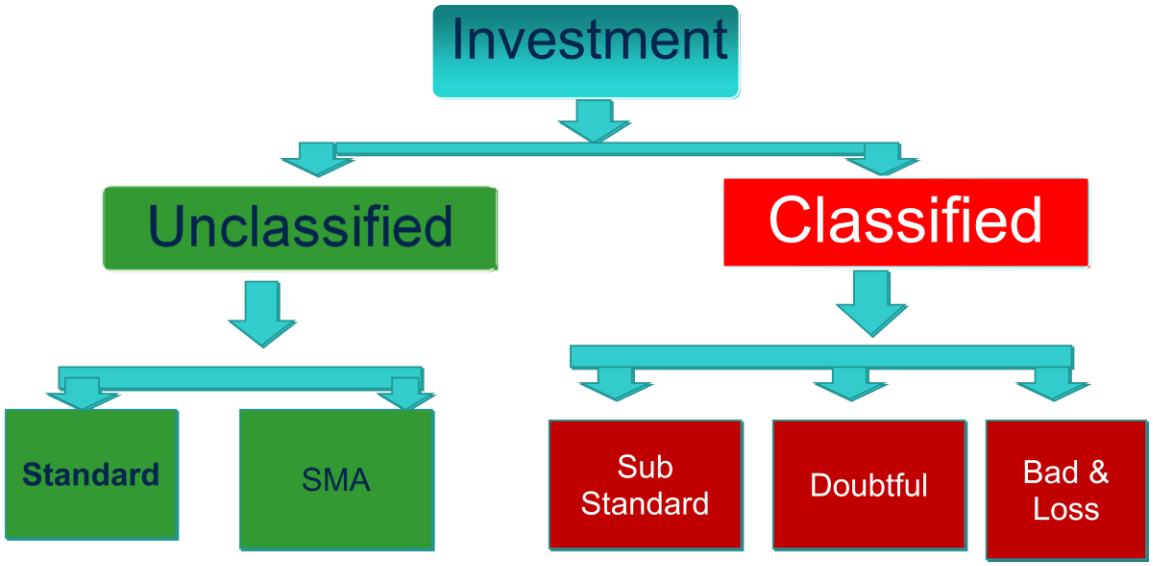
2) Demand investment: The investments that become repayable on demand by the bank will be treated as Demand investments. If any contingent or any other liabilities are turned to forced investments (i.e. without any prior approval as regular investment) those too will be treated as Demand investments. Such as: Bai-Muajjal FC Bills etc.

3) Fixed Term investment:The investments, which are repayable within a specific time period under a specific repayment schedule will be treated as Fixed Term investments. Example: Housing Finance under HPSM

4) Short-term Agricultural Credit will include the short-term credits as listed under the Annual Credit Program issued by the Agricultural Credit Department of Bangladesh Bank. Credits in the agricultural sector repayable within less than 12 months will also be included herein.

& Short-term Micro-Credits will include any micro-credits for less than Tk.50,000/= and repayable within less than 12 months, be those termed in any names such as Non-agricultural credit, Self-reliant Credit

Five categories on basis of CL Status



Basis for Classification

(A) Objective Criteria
(A)Qualitative Judgment

(A) Objective Criteria:

i Past Due/Over Due –Any i. continuous & ii. Demand investment not repaid/renewed within the fixed expiry date for repayment or after demand by bank will be treated as past due/ overdue from the following day

ii In case of any installment(s) or part of installment(s) of a Fixed Term Loan is not repaid within the fixed expiry date, the amount of unpaid installment(s) will be treated as past due/overdue after six months of the expiry date

iii Short-term Agricultural & Micro Credit is not repaid within the fixed expiry date will be treated as past due/ overdue after 6 months of the expiry date.

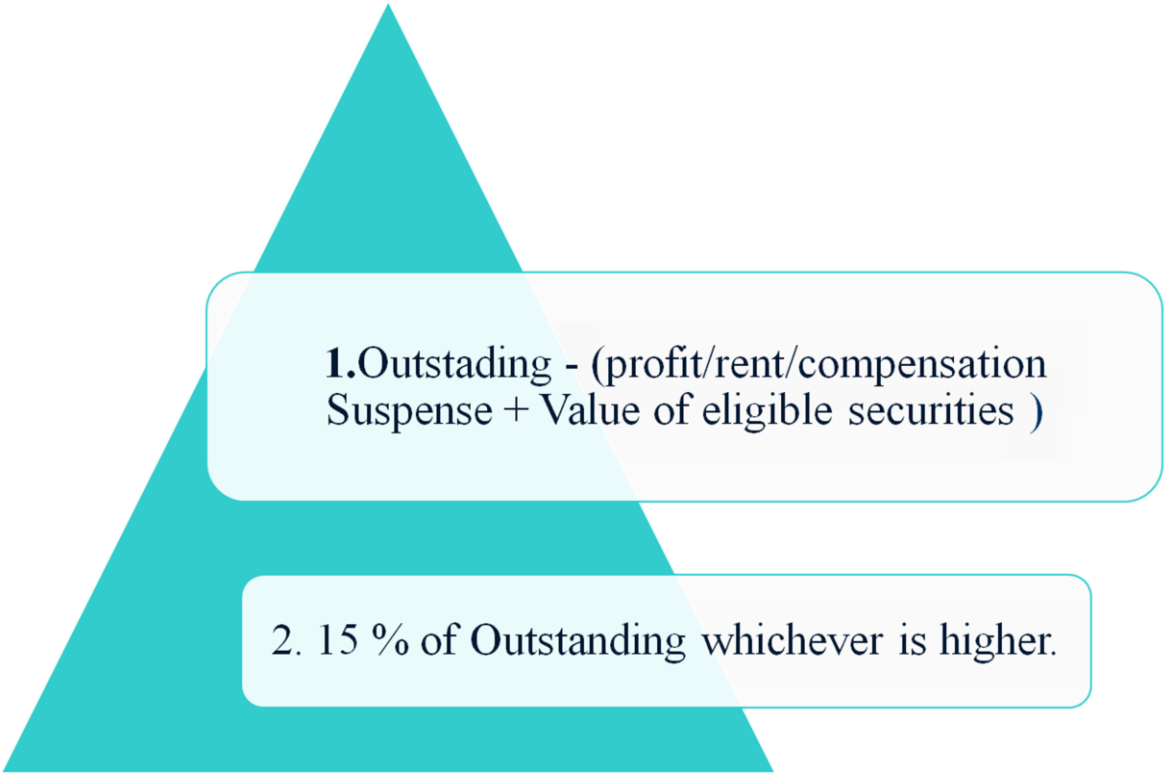
(A)Objective Criteria: Month/ Installment (over due)
(BRPD Circular 14 & 3)

Types of Investment	Unclassified		Classified		
	Standard	SMA	SS	DF	BL
Continuous Investment	<2	2	3	9	>12
Demand Investment	<2	2	3	9	>12
Term Investment	<8	8	9	15	>18
Short Term Agricultural Credit & Micro Credit	0<12		12	36	>60

(B). Qualitative Judgment for classification:

- If any situational changes occur in the stipulations in terms of which the investment was extended .
- If the capital of the borrower is impaired due to adverse conditions
- If the value of the securities decreases .
- If the recovery of the investment becomes uncertain due to any other unfavorable situation, the investment will have to be classified on the basis of qualitative judgment.
- Besides, if any investment is illogically or repeatedly re-scheduled or the norms of re-scheduling are violated
- Instances of frequently exceeding the investment-limit are noticed
- Legal action is lodged for recovery of the investment
- The investment is extended without the approval of the proper authority, it will have to be classified on the basis of qualitative judgment.

Base for Provision :



Provision: Portion of profit which is segregated to meet up unexpected/ uncertain liability and to save guard the interest of the depositor and the banks.

Base for provision:
=Classified amount – (profit/rent /compensation suspense + eligible security)
Example: Classified amount=10,00,000/-
Profit suspense=1,00,000/-
Eligible security =5,00,000/-

Base for provision: 10,00,000-1,00,000-5,00,000=4,00,000/-

Provision requirement:
Sub Standard =4,00,000*20%=80,000/-
Doubtful =4,00,000*50%=2,00,000/-
Bad& Loss =4,00,000*100%=4,00,000/-

Profit/Rent/Compensation Suspense :

- If any investment classified as 'Sub-standard' and 'Doubtful', Profit/Rent/Compensation accrued on such investment will be credited to Profit/Rent/Compensation Suspense Account, instead of crediting the same to Income Account.

- In case of rescheduled investments the unrealized Profit/Rent/Compensation , if any, will be credited to Profit/Rent/Compensation Suspense Account, instead of crediting the same to Income Account.

- If classified as 'Bad/Loss', charging of profit in the same account will cease.

- If classified investment or part of it is recovered i.e., real deposit is effected in the investment account, Recovery will be followed as a. Other Charges b. Profit/ Rent c. Principal & d. Compensation.

Value of eligible securities

In the definition of 'Eligible Securities' as mentioned in the above paragraph are the following :

- -100% of **deposit** under lien against the investment
- -100% of the value of **government bond/savings** certificate under lien.
- -100% of the value of **guarantee** given by Government or Bangladesh Bank
- -100% of the market value of **gold** or gold ornaments pledged with the bank.
- 50% of the market value of easily marketable commodities kept under control of the bank
- Maximum 50% of the market value of land and building mortgaged .
- 50% of the average market value for last 06 months or 50% of the face value, whichever is less, of the shares traded in stock exchange.

Rate of provision

Particulars		Short term agri. credit & Micro credit	Consumer Financing		SMEF	All Other Credits
			Other than HF	HF		
Unclassified (General provision)	Standard	1%	5%	1%	0.25%	1%
	SMA	-	5%	1%	0.25%	1%
Off balance sheet and OBU	@1% on total Off balance sheet items and OBU investment					
Classified (Specific provision)	SS	5%	20%	20%	20%	20%
	DF	5%	50%	50%	50%	50%
	BL	100%	100%	100%	100%	100%

Written off Investment:

Banks **write off** investment that is declared non collectable (such as a **investment** on a defunct business, or a credit card due that is in default), removing it from their balance sheets. A reduction in the value of an asset or earnings by the amount of an expense or loss.

3(Three) Conditions:

1. 3 years classified as Bad & Loss
2. 100% provision kept against the investment.
3. Artha Rin Suit filed against the clients except 2,00,000/- outstanding clients.

Note:

If written off Investment is more than 15% of total classified investment , additional 1% capital charge on Minimum capital requirement(MCR).

Rescheduling Investment:

Rescheduling means new investment that replace the outstanding balance of an older investment and is paid over a longer period usually with a lower installment.

Down payment Rate of Rescheduling:

Number of Rescheduling	Term Investment	Continuous and Demand Investment
1st Time	15% of CL outstanding or 10% of total investment which ever is lower.	Up to 1 crore 15%. Upto 05 crore 10% but not less than 15 lac. Above 5 crore 5% but not less than 50 lac.
2nd Time	30% of CL outstanding or 20% of total investment which ever is lower.	30% of CL Investment or 20% of total investment which ever is lower.
3rd Time	50% of CL outstanding or 30% of total investment which ever is lower.	50% of CL outstanding or 30% of total investment which ever is lower.

Time limit for Rescheduling

Number of Rescheduling	Nature of Investment	Classified as SS	Classified as DF	Classified as BL
	Continuous	18 months	12 months	12 months
1st Time	Demand	12 months	09 months	09 months
	Term	24 months	18 months	18 months
	Agri/Small	24 months	-	-
	Continuous	12 months	09 months	09 months
2nd Time	Demand	09 months	06 months	06 months
	Term	18 months	12 months	12 months
	Agri/Small	12 months	-	-
	Continuous	06 months	06 months	06 months
3rd Time	Demand	06 months	06 months	06 months
	Term	12 months	09 months	09 months
	Agri/Small	06 months	-	-

Non Performing Investment (NPI):

Components of Non Performing Investment:

1. Overdue
2. Classified Investment:
   - Sub Standard
   - Doubtful
   - Bad & Loss
3. Rescheduling & Restructuring
4. Written off

Causes of Non Performing Investment:

i. Wrong selection of the client.

ii. Lack of professional knowledge.

iii. Violation of discretionary power.

iv. Malpractices for investment operations.

v. Lack of close monitoring and supervision.

vi. Fund diversification/Diversion of sale proceeds.

vii. No control over the stock.

viii. Delay in sanction.

ix. Political unrest and recession in the market.
x. Lack of prudence & foresight.
xi. Over trading beyond capacity.
xii. Under financing or over financing.
xiii. Willful defaulter/political involvement.
xiv. Lack of corporate management.
xv. Under invoicing of export & over invoicing of import.
xvi. Natural disasters/calamity.
xvii. Non-compliance of Shariah principles.
xviii. Corruption of the bank officials

Steps which to be taken for reduction of NPI*:*

i. Selection of Best Client.
ii. Motivation Strategy for clients to be adopted.
iii. Adherence to Shariah Principles.
iv. Marketability of Goods to be assessed.
v. Security & Documentation formalities to be completed.
vi. Prompt Disposal of investment sanction.
vii. Close Supervision, Follow up and Monitoring.
viii. Control of Goods & Disposal of Goods in Time.
ix. Violation of Discretionary Power to be stopped.
x. Personal Relationship to be developed.
xi. Legal Action in time as per circulars.
xii. Right Drive in Right Time by Right Person.

Strategies which to be taken for reducing NPI and safeguarding bank's provision:

i. Extending term to maturity of performing investment.
ii. Rescheduling of classified investment.
iii. Restructuring of classified & regular investment.
iv. Conversion of short term liability into term liability against freehold and rent-able assets of client.
v. Collecting installment to reduce level of classified liability i.e. social engineering.
vi. Investment written off.

vii. Withdrawal of the writ cases

viii. Wavering of partial liability to adjust classified liability.

ix. Valuation of properties including financial securities.

x. Check up the last CL status and change the status of CL

xi. Arrest fresh NPI

xii. Strengthening task force activities

xiii. Special measures to be taken for quick disposal of suits.

xiv. Personal contact and communication with the NPI clients.

Impact of Non-Performing Investment:

i. Loss of profit of the Bank.
ii. Decrease of PPD and resulting to decrease Deposit.
iii. Provision required from the hard earned income of bank.
iv. Lower grading in CAMELS Rating.
v. Facing difficulty to open New Branch & AD permission
vi. Difficulties to maintain IDR and CAR under Basel-III
vii. Decrease of EPS & Dividend of Shareholders.
viii. Decrease the facilities of Bank officials.
ix. Business Growth to be decreased drastically.
x. Loss of Goodwill & Reputation of the Bank.

Decision for Legal Action for recovery of Bank's dues:

If all Persuasions, Contacts & Efforts failed, then decision to be taken for legal action

i. Proposal to be sent HO seeking permission for selling of mortgaged property and filing of suit.

ii. After getting HO permission, the next course of action to be started.

Legal Action - CR Case Filed:

i. Criminal case as per NI Act to be filed against the defaulter client before expiry of cheque.
ii. Legal notice to be served for dishonoring that cheque giving 30 days time.
iii. Criminal case to be filed in the CMM court for recovery.
iv. In case of without mortgaged property, CR case to be filed at the earliest.
v. Remember even after cases, persuasion to be continued to settle the issue outside the court.

Legal Action - Artho Rin Adalat:

i. Recovery notice to be served giving 7-15 days time asking client to adjust liability
ii. Final notice to be served giving 15 day's time warning that otherwise case may be filed
iii. Legal notice to be served giving 15 days time
iv. Advertisement in 2(two) dailies to be served for selling out mortgaged property giving 15 days time
v. If liability not adjusted even of selling of mortgaged property then Money Suit may be filed.

Assets Quality Improvement of a Bank:

Pre-sanction of Investment:

i. Selection of the Client
ii. Business Address of the Client
iii. Nature of Business
iv. Needs of Finance
v. Project Appraisal
vi. Collaterals and its clean Legal Opinion
vii. Sanctioning Formalities

Post Sanction but pre-disbursement of Investment stage:

i. Terms & Condition of Sanction to be conveyed to the Client
ii. Sanction Advice to be dully accepted by the Client
iii. Title of Security & Relevant Documents to be received
iv. Mortgage & Documentation Formalities to be executed
v. Guarantor Identification to be confirmed
vi. Entry the Security Documents and Preserved in the Custody

Post Disbursement of Investment stage:

i. Review Transactions in Current Account regularly.
ii. Ensure Stock of Goods & Quality of the same.
iii. Physical Visit the Godown & Business Establishment/Project

iv. Posting of Godown Guard & Controlling of Goods
v. Ensure Timely Adjustment/Payment & Follow up continuously
vi. Ensure Deposit of Sale Proceeds to the Bank
vii. Strong Communication with the Client

Investment policies of IBBL

1. To diversify the investment portfolio by size, sector, geographic area, economic purpose, securities, mode, administrative divisions and Bangladesh Bank sector codes of investment as per perspective investment policy and plan to minimize the risk as well as to achieve the goals of Islamic Banking.

2. To give preference to investment in smaller size (up to Tk. 150 million), SME. Real Estate. Retail, Consumer and other special schemes including RDS, Women Entrepreneurship Investment Scheme (WEIS) and Palli Griha Nirman Beniyog Prakalpa for income & generations.

3. To give preference to short-term investment over long term investment for maintaining a balance portfolio.

4. To deploy maximum (at least 60%) deposits in the locality where the branch is located.

5. Investment should be allowed as far as possible within the command area of the branch. Deviation, if any, shall explicitly be explained in the proposal.

SINGLE BORROWER EXPOSURE:

i) The outstanding amount of exposure, both funded and non-funded, to a single person or a group shall not exceed 35% of the capital at any point of time.

ii) The aggregate outstanding principal amount of funded exposures shall not exceed 15% of the capital at any point of time.

iii) In case of export financing, the outstanding amount of exposure, both funded and non-funded, at any point of time to a single person/counterparty or a group shall not exceed 50% of the capital. However, the aggregate outstanding principal amount of funded exposures shall not exceed 15% of the capital at any point of time

Large Investment:

i) Large loan refers to any exposure to a single person or a group which is
Equal to or greater than 10% of the capital

Investment Structuring & Pricing:

Generally Bank makes investment portfolio under its investment policy set by the authority with cope of Government Policy and Interest. Besides, the bank takes its investment as per Asset Liability Management (ALM) Guidelines. Investment pricing means determining the profit rate for granting investment to the client, be it individuals or business firms. It is one of the most important, however difficult task in investment funds to business firms & other customers. Because it is always very difficult to exactly know what the actual credit risk a particular

investment application is. Generally the lender wants to charge a high enough rate to make sure that the investment will be profitable as well as it will covers enough compensation against the default risk. On the other hand investment price must be set low enough that helps the customers to find it easy for successful repayment of investment.

<u>Building blocks of Investment pricing</u>:

Banks must price loans to cover all costs, including a certain number of basis points over the life of the Investment to account for each of the following:

Cost of funds- The rate at which the bank is able to attract funds of equivalent tenor to the Investment in question. In banks that apply funds transfer pricing, this rate is a wholesale rate, usually the swap rate (fixed or floating, depending on whether the Investment is fixed or floating) of an equivalent tenor.

Expected loss- The number of basis points that corresponds to the expected loss on the Investment, which will be higher on Investment with more Investment risk and lower on Investment with less Investment risk. Although banks do not make loans with the expectation of suffering any loss, this amount is not zero for any loan, no matter how well collateralized or guaranteed.

Cost of allocated capital- The cost of allocated capital is the amount of capital the bank has allocated to the loan as coverage for unexpected loss, multiplied by the target return on equity for the bank as a whole, and expressed in terms of basis points. As a simplification, banks often use the risk-based capital requirement as a proxy for the amount of capital that should be allocated to the loan.

Term cost of liquidity- The number of basis points that captures the cost arising from the fact that Investments of longer and longer tenor require stable funding of longer and longer tenor, which will be costly for the bank above and beyond any profit-rate risk considerations (which will be captured in the swap rate).

Cost of liquid asset buffer- Banks rarely “maturity-match” a loan with a specific source of funding of equivalent tenor. They rightly know that a mix of current accounts, savings accounts, and fixed deposits will render a stable source of funds under most circumstances. However, in extremely adverse and rare circumstances, a run on deposits may occur and the bank may be forced to sell assets quickly at low prices or seek additional deposits or other funds at high rates. For this reason, a liquid asset buffer must be held for these unexpected situations. Since these assets either earn no profit at all, or very little profit for the bank, there is an opportunity cost for holding the assets that must be expressed in terms of basis points and included in the determination of the Investment rate.

Investment administration costs- For any Investment, big or small, there are staff costs involved in origination and monitoring. Some of these costs are up-front and some are ongoing, but they all must be expressed in terms of basis points over the life of the Investment

□□*Competitive margin*- Finally, after all other costs have been included in the rate, the bank will add on a certain number of basis points to earn a margin. This component is the only one that is fully at the discretion of the bank, given its funding and expense structure. This margin may even be negative, if the bank desires to gain a temporary competitive advantage. However, it should not be negative on any kind of loan product for an extended period of time. Banks should be able to show to BB at all times that they have priced their recently-originated Investments to cover all of these costs.

Documentation:

Document: A piece of written, printed or electronic matter that provides information or evidence or that serves as an official record**.**

Documentation: Creation of charge over the documents/ property is called documentation. It is process of execution of documents in right form & right manner.

Importance of Documentation:

i) It is a written evidence of transaction
ii) To Protect Banks Interest
iii) To Take Legal Action
iv) To Ensure Recovery
v) To Avoid Future Complexity.

Nature of Documentation:

A. Charge Document: It is a pre formatted & printed forms provided by the Bank to the client for the execution of charge against investment.

B. Legal/ Mortgage Document: It is the legal papers provided by the owner of the paper certifying the legal status of borrower related to the creation of charge on the paper.

Items of charge documents:

- Application
- Sanction Letter dully signed by the client.
- Letter of Agreement
- DP Note
- DP note delivery letter
- Letter of Hypothecation
- Letter of Guarantee
- Pledge Letter(Lien of deposit)
- Stamping.

Items of Mortgage Document:

- Original Title Deed or certified Title Deed with SRO
- Baya Deed
- CS,SA,RS,BS Khatian/porcha, City Jorip
- DCR, Mutation with Porcha

- Up to date Rent Receipt
- NEC
- Mouza Map/Site plan
- Clean Legal Opinion
- Genuineness Certificate
- Valuation Certificate(surveyor& Branch)

How to obtain ownership?

1. By way Title Deed (Sub kobla, Heba, Will)
2. By way of Khatian or Porcha
3. By way of Settlement or Jorip

History of Land ownership:

1. Mogul age(1526-1757)
2. East India company (1757-1857)
3. British age(1857-1947)
4. Pakistan age(1947-1971)
5. Bangladesh age(1971-----)

Types of Khatian:

1. CS Khatian (1888-1940)
2. SA Khatian (1956-1966)
3. RS Khatian (1966-1980)
4. City Jorip (1984-2000)
5. BS/BRS continued------

WHAT IS MORTGAGE:

- Mortgage means, transfer of an interest in specific immovable property for the purpose of securing the payment of money advanced or to be advanced by way of loan, an existing or future debt, or the performance of an engagement which may give rise to a pecuniary liability. (TP Act-1882, Section 58)
- The transferor is called a mortgagor, the transferee is called a mortgagee, the principal money and interest of which payment is secured for the time being are called the mortgage-money and the instrument by which the transfer is affected is called a mortgage-deed.

TYPES OF MORTGAGE:

There are six kinds of Mortgages (TP Act-1882)

- Simple Mortgage/**Registered mortgage**: Mortgagee shall have to seek the intervention of the court for selling the mortgage property.
- **Mortgage by conditional sale**: It is an ostensible sale not a real sale. Mortgagee upon applying to the court can get decree in his favor.
- **English Mortgage**: Property mortgaged is transferred to the mortgagee absolutely. Mortgage property may sale without intervention of the court

- **Usufructuary Mortgage**: Property is delivered to the mortgagee who is entitled to recover the rents and profits. Mortgagee remains in possession of the property.
- **Equitable Mortgage**: Deliver the little of immovable property with the intention to create a security there on, no legal transfer of property take *place*
- **Anomalous Mortgage**: Containing a mixture of the characteristics of the different types of above mortgage, take various forms depending upon customers, local usage or contact.

Tools & Techniques of verification of Mortgage Documents:

- Physical verification by the authorized Bank Officials.
- Searching report from SRO. / AC land Office
- Valuation Report made by Bank's enlisted Surveyor Co
- Registered Mortgage Deed (Conformation of Physical presence of the Mortgagor)
- Registered Power of Attorney
- Approved Plan with Forwarding Letter from Competent Authority -Verification from RAJUK/Competent Authority.
- Mouza Map
- Site Map/ Location Map
- Original Allotment Letter (In case of property of Housing Authority/Others Authority i.e. RAJUK, CDA, KDA, RDA, BEPZA))
- Mutation Permission (In case of Property of Housing Authority/Others Authority i.e. RAJUK, CDA, KDA, RDA, BEPZA)
- Mortgage Permission (In case of Property of Housing Authority/Others Authority i.e. RAJUK, CDA, KDA, RDA, BEPZA))
- Sale Permission (In case of Property of Housing Authority) Procedures/Formalities that should be observed at the time

Lapses & irregularities found in Mortgage formalities:

- Obtaining conditional legal opinion instead of clean opinion.
- Lawyer's opinion does not contain the chain of ownership in details.
- Valuation Certificate made without physical inspection.

3rd (Third party):

- Having no relation with the client.
- Head office permission to be obtained.
- Enhance Due Diligence is to be given in case of 3rd party mortgage.

Preservation of Documents:

- Enter into Documents Execution Reg (B-103)
- Documents kept under Joint Custody.
- Maintenance of Ex Custody Reg (B-112)

Concept of Working Capital:

Any enterprise whether it is industrial or trading requires two types of assets to run its business. It requires fixed assets for carrying on the production/business such as land and buildings, plant and machinery, furniture and fixtures etc. For a going concern these assets are of permanent nature and are not to be sold. The other types of assets is required for day to day working of a unit are known as current assets which are floating in nature and keep changing during the course of business. These current assets are generally referred to working capital.

Noted that there may not be any fixed ratio between the fixed assets and floating assets for different projects as their requirement would differ depending upon the nature of project. Big industrial projects may require substantial investment in fixed assets and also large investment for working capital. The trading units may not require heavy investment in fixed assets while they may be carrying huge stocks in trade. The service units may hardly require any working capital and all investment may be blocked in creation of fixed assets.

Net Working Capital:

The total current assets with the firm may be taken as gross working capital whereas the net working capital with the unit may be calculated as under:

Net Working Capital = Current Assets - Current Liabilities

Current Assets: Current assets represent all the assets of a company that are expected to be conveniently sold, consumed, used, or exhausted through standard business operations within one year.

Current assets include

1. Cash and Cash Equivalents
2. Marketable Securities
3. Account Receivables
4. Inventory/Stock
5. Prepaid Expenses
6. Non-Trade Receivables
7. Other Liquid Assets

Current Liability: ***Current liabilities*** ***are a company's debts or obligations that are due to be paid to creditors within one year***

- Accounts payable - This is money owed to suppliers.
- Accrued expenses - These are monies due to a third party but not yet payable; for example, wages payable.
- Accrued Interest - This includes all interest that has accrued since last paid.
- Bank account overdrafts - These are short term advances made by the bank for overdrafts.
- Bank loans or notes payable -This is the current principal portion of a long-term loan.
- Current maturities of long-term debt - This is the part of a long term debt that is due in the upcoming 12 months.
- Customer deposits or unearned revenue - These are payments given by customers as an advance for future work that is expected to be completed by the end of the next 12 months.
- Dividends payable - These are the dividends declared by the company Board of Directors that have not yet been paid to the shareholders.
- Income taxes payable - These are taxes owed to the government that have not yet been paid.
- Interest payable - This is interest owed to lenders that has not been paid.
- Notes payable (other than bank notes) - This is the current principal portion of long-term notes.
- Payroll taxes payable - This is taxes withheld from employees or taxes related to employee compensation.
- Rental payments - These are paid for renting buildings, land, pastures or other property or structures.
- Short-term notes payable - These loans are due upon demand or within the next year.
- Sales taxes payable - These are taxes collected from customers for the government that need to be paid to the government.
- Wages - These are owed to employees.

Asset = Owners Equity + Liability

Components of owner's equity:

1. Preferred Stock: Preferred stock is a type of ownership in a company. ..
2. Common Stock:. Common stock also represents ownership in a company. ...
3. Additional Paid-up-Capital. ...
4. Retained Earnings. ...
5. Treasury Stock.
6. General Reserve
7. Warrants
8. Dividend

Methods for Estimating Working Capital Requirement:

Operating Cycle Method: This is probably the best method because it takes into account the actual business or industry situation into consideration while giving an estimate of working capital. A general rule can be stated in this method. Longer the working capital operating cycle, higher would be the requirement of working capital and vice versa. We would agree to the point also. The following formula can be used to estimate or calculate the working capital.

Working Capital = Cost of Goods Sold (Estimated)*(No. of Days of Operating Cycle/365 Days) + Bank and Cash Balance.

If the cost of goods sold (estimated) is Tk. 35 million and operating cycle is 75 days and bank balance required is Tk. 1.25 million. Therefore, Working Capital = 35 * 75/365 + 1.25 = Tk. 8.44 Million. In this method, each component can also be calculated. It means bifurcation of Tk. 8.44 million can be done in inventory, cash, accounts receivable, accounts payable etc.

The day to day business operations of a concern of any nature and size involves many successive steps and final working results would depend on the effective combination of all these steps:

- ***i.*** Acquisition and storage of raw material and stores & spares for manufacture of any product.
- ***ii.*** Actual working process when the raw material is subjected to different processes to bring it to final shape of finished goods.
- ***iii.*** Storage of finished goods awaiting sales.
- ***iv.*** Sales of finished goods and realisations of sale proceeds.

All these steps put together form an operating cycle which can be represented diagrammatically as under:

SRM = Stock of Raw Materials; RM = Raw Materials; FG = Finished Goods; WIP = Work- in-Process. In case of trading concern WIP is not required. We start from cash to buy raw material etc. and after completing all the steps end up with the cash. The intervening period required for completion of this entire process is 'Operating Cycle'. The operating cycle may be defined as the intervening period from the time the goods or services enter the business till their realisation in cash.

$$\text{Total working capital requirement} = \frac{\text{Total operating expenses expecting during the year}}{\text{No. of operating cycles in a year}}$$

This system of calculation of working capital requirement is not in vogue as it only helps to assess the total requirement of a unit whereas the banks granting working capital limit would be interested in proper classification of its various components. The concept of operating cycle throws light on various components of working capital required for the unit and these components may be classified as under:

1. Raw material stores and spares consumed in the production process. The unit must have some stocks of these items for uninterrupted production.
2. Manufacturing expenses such as wages, power and fuel etc. to be incurred during the process of manufacture.
3. Stocks of work-in-process/semi finished goods maintained by the unit to complete an operating cycle.

4. Stocks of finished goods awaiting sale. All the finished goods may not be immediately sold.
5. Administrative and selling expenses during this process.
6. Accounts Receivable/debtors for credit sales.
7. Account Payable/Creditors for credit purchase

All or some of these components in varying proportions are required for any business.

The Factors or Components to forecast the requirements of Working Capital:

1. Total amount/unit of production over the year
2. Costs under Work-in-Process:
    i. Cost of Raw Materials per unit
    ii. Cost of Labor per unit
    iii. Cost of Factory Overhead per unit
3. Raw Material Conversion Period
4. WIP Conversion Period
5. Finished Goods Conversion Period
6. Credit Period allowed to Debtors
7. Credit Period allowed by Creditors
8. Expected Cash Balance in Hand/Bank
9. Time Lag in Payment of Wages
10. Time Lag in Payment of FOH/Administrative/other expenses
11. Reserve for Contingent i.e. emergent fund
12. Depreciation
13. Advance Payment
14. A few Assumptions:
    i. Production has been carried on evenly throughout the years and the labor & overhead accrue similarly.
    ii. Debtors/Account Receivable has been taken at cost price
    iii. All sales are on credit
    iv. All purchase are on credit
    v. 360 days/52 weeks/12 months equivalent to a year

Format for Assessment of Working Capital:

Items	Formula	Calcula	Tk
(A) Current Assets:			-
1.Expected Cash in Hand or at Bank			
2.Stock of Raw Materials (cost at factory site)	APU*CP*PUC/12/52/360		
3.Cost of Work-In-Process (at production cost):			
i) Raw Materials	APU*CP*PUC/12/52/360		-
ii) Wages/Labor	APU*CP*PUC/12/52/360		-
iii) Factory Overheads	APU*CP*PUC/12/52/360		-
4.Stock of Finished Goods (at production cost)	APU*CP*PUC/12/52/360		-
5.Sundry Debtors/Accounts Receivables (at production cost)	APU*CP*PUC/12/52/360		-
6.Advance Payment of Tax or other Expenses			-
7.Reserve for Contingent			
Less (B) Current Liabilities:			
1. Sundry Creditors/Accounts Payable (cost at factory/RM cost)	APU*CP*PUC/12/52/360		
2. Lag in Payment of Wages/Labor (Wages due for payment)	APU*CP*PUC/12/52/360		
3. Lag in Payment of Factory Overhead (FOH due for payment)	APU*CP*PUC/12/52/360		
4. Other Current Liabilities due for payment			
Working Capital Requirements (A- B)			
	-		
	-		
	-		
	-		
	-		

Elaborations:

APU= Annual Production Unit

CP = Conversion Period

PUC = Per Unit Cost

Assumptions:

i) Production has been carried out on evenly throughout the year and labor and overhead accrue similarly.

ii) Debtors /Accounts Receivable has been taken at cost price

iii) All sells are on credit.

iv) All purchase are on credit.

v) 360 day/52 week/12 months equivalent to ayear.

Problem & Solution for calculating the requirements of Working Capital

Problem-1:
A newly formed firm has applied for short-term investment to a commercial bank for financing its working capital requirements. You are requested by the bank to prepare the requirements of working capital for that firm. The information about the firm is as under:

Estimated cost per unit of production is:	Taka
Raw Materials	80
Direct Labor	30
Overheads (excluding depreciation)	60
Total Cost	170

Other Information:

1. Selling price, Tk. 200 per unit.
2. Level of activity, 104,000 units per annum.
3. Raw Materials in stock, 4 weeks.
4. Work in Process (Assume 50% completion stage of conversion cost and 100% completion stage in respect of Raw Materials), average 2 weeks.
5. Finished Goods in stock, average 4 weeks.
6. Credit allowed by suppliers, average 4 weeks.
7. Credit allowed to debtors, average 8 weeks.
8. Lag-in payment of wages, average 1½ weeks.
9. Cash at Bank expected to be, Tk.25000.

Production is carried on evenly throughout the year i.e. 52 weeks and all sales are on credit basis only.

Solution:

Assumptions:

i) Production has been carried out on evenly throughout the year and labor and overhead accrue similarly.

ii) Debtors /Accounts Receivable has been taken at cost price

iii) All sells are on credit.

iv) All purchases are on credit.

v) 360 day/52 week/12 month's equivalent to ayear.

Assessment of Working Capital Requirements

Items	Computation	Details	Amount (Tk)
Raw Materials in Stock	(1,04,000*4/52) x 80		6,40,000
Work-in Process:			
- Raw Materials	100%x (1,04,000*2/52)x80		3,20,000
- Wages	50% x (1,04,000*2/52)x30		60,000
- Overheads	50% x (1,04,000*2/52)x60		1,20,000
Finished Goods Stock	(1,04,000*4/52)x170		13,60,000
Receivables	(1,04,000*8/52)x170		, 2720,000
Cash at Bank			25,000
			52,45,000
Less:	(1,04,000*4/52*80	6,40,000	
Creditors	(1,04,000*3/2*1/52*30	90,000	
Lag in Payment of Wages			(7,30,000)
Net Working Capital requirements			45,15,000

Problem-2:

You are asked to prepare a statement showing the working capital needed to finance a level of activity of 300,000 units of output for the year. The cost structure for the company's product for the above mentioned activity level is detailed below:

Elements of cost	Cost per unit (Tk.)
Raw Materials	20
Direct Labor	5
Overheads	15
Total cost	40
Profit	10
Selling price	50

Additional information:

i. Raw materials are hold in stock, on an average for 2 months
ii. WIP will approx to half- a- month
iii. Finished goods are kept in stores for 1 month
iv. Credit allowed to debtors 2 months
v. Suppliers of materials extent 1 month credit.
vi. Minimum Cash Balance of Tk. 25,000 is expected to be maintained.

Solution:

Assumptions:

i) Production has been carried out on evenly throughout the year and labor and overhead accrue similarly.

ii) Work in process are in 50% completion stage

iii) Debtors /Accounts Receivable has been taken at cost price

iv) All sells are on credit.

v) All purchases are on credit.

vi) 360 day/52 week/12 month's equivalent to ayear.

Statement of Working Capital Requirements

Items	Computation	Details	Amount (Tk)
Raw Materials in Stock	(3,00,000*2/12) x 20		10,00,000
Work-in- Process:			
- Raw Materials	(3,00,000 x 0.50/12) x 20	250,000	
- Direct Labor	(3,00,000 x0.50/12) x 5 x .50	31,250	
- Overheads	(3,00,000 x0.50/12) x15 x .50	93,750	3,75,000
Finished Goods in Stock	(3,00,000*1/12)*40		10,00,000
Receivables	(3,00,000*2/12)*40		20,00,000
Cash at Bank			25,000
			44,00,000
Less:			
Creditors	(3,00,000*1/12)* 20		(5,00,000)
Net Working Capital			39,00,000

Problem:3

The cost accountant provided with the following information about production cost and other related issues of the company.As the financial manager of the company you are required to calculatedthe working capital requirement.

Annual production …….60,000 units

Raw material cost per unit……..Tk.80

Direct Labour Cost per unit…… 20

Overhead Cost per unit…… 60

Total cost per unit……. 160

Profit per unit …… 40

Selling price per unit…….. 200

Other information :

i) Direct Raw materials are in stock on an average for one Month

ii) Work in process on an average for half a month

iii) Finished goods are in stock on an average for 2 months

iv) Credit allowed by creditors is 2 months and to debtors is 1 month.

v) Lag in payment of wages 1 month

vi) Cash in hand and bank is expected to be Tk. 50,000

Solusion:

Assumptions:

i) Production has been carried out on evenly throughout the year and labor and overhead accrue similarly.

ii) Work in process are in 50% completion stage

iii) Debtors /Accounts Receivable has been taken at cost price

iv) All sells are on credit.

v) All purchases are on credit.

vi) 360 day/52 week/12 month's equivalent to ayear.

A company

Statement of working capital requirement forecast

Details	Calculation	Amount
A. Current Assets: 1. Cash in hand 2. Raw materials 3. Working process 4. Finished goods 5. Debtors/ Accounts receivable	 60,000*1/12*80 60,000*.50/12*120 60,000*2/12*160 60,000*1/12*160	 50,000 4,00,000 3,00,000 16,00,000 8,00,000
Total Current Assets		31,50,000
B. Current liability: 1. Creditors/Accounts payable 2. Differed wages	 60,000*2/12*80 60,000*1/12*20	 8,00,000 1,00,000

Total Current Liabilities		9,00,000
Net Working Capital (A-B)		22,50,000
Working Capital requirement		22,50,000

Ratio Analysis:

Ratio analysis is defined as the systematic use of ratio to interpret the financial statements so that the strengths and weakness of a firm could be known. It is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and income statement.

Problem:1

Total sales for the year 2009 were Tk.27,00,000 and the balance sheet of Alfa Co. Ltd. As on 31st December was as follows:

Assets	Tk.	Equity & Liability	
Cash in hand	3,00,000	Sundry creditors	5,00,000
Sundry debtors	3,00,000	Outstanding expenses	2,00,000
Short term investment	10,00,000	Notes payable	3,00,000
Inventory	3,00,000	Long term debts	8,00,000
Goodwill	1,00,000	Reserves	2,00,000
Fixed assets	10,00,000	Paid up capital	10,00,000
	---		---

	30,00,000		30,00,000

Calculate the following ratios:

i) Current ratio;
ii) Quick ratio;
iii) Inventory turnover ratio
iv) Debt equity ratio
v) Debt to total asset ratio
vi) Fixed asset turnover ratio

Solution:

i) Current ratio= $\frac{\text{Current Asset}}{\text{Current Liability}} = \frac{19,00,000}{10,00,000} =$ 1.90 times

ii) Quick ratio = $\frac{\text{Current Asset} - \text{Inventory}}{\text{Current Liability}} = \frac{19,00,000-3,00,000}{10,00,000}$ =1.6 times

iii) Inventory turnover ratio = $\frac{\text{Cost of goods sold}}{\text{Average Inventory}} = \frac{21,60,000}{3,00,000}$ =7.20 times

Assumption: GP rate is 20% , So, Cost of goods sold = 27,00,000*80% = 21,60,000
Assumption: Opening Inventory is Tk. 3, 00,000.00

iv) Debt Equity ratio = $\frac{\text{Total debt}}{\text{Equity}} = \frac{18,00,000}{12,00,000} =$ 1.50 times

v) Debt to total Assets ratio = $\frac{18,00,000}{30,00,000}$ =0.60 times

vi) Fixed Assets turnover ratio = $\frac{\text{Net Sales}}{\text{Fixed Assets}} = \frac{27,00,000}{10,00,000}$ =27

Problem:2

Balance Sheet of Tata Co. Ltd.
As on 31st December,2020

Liabilities	Tk.	Tk.	Assets	Tk.	Tk.
Shareholder' fund:			Fixed assets		
Equity share capital	1,50,000		Current assets:		
12% Preference share capital	30,000		Stores	12,000	
Reserves and surplus	24,000		Inventory	32,000	
	----------	2,04,000	Accounts receivable	10,000	
		48,000	Cash in hand	2,000	
12% Bonds			Cash in bank	4,000	
Current liabilities:				--------	60,000
Bank overdraft	12,000		Preliminary expenses		48,000
Accounts payable	16,000		Discount on issue of debenture		4,000
Proposed dividend	2,000				
Provision for taxation	10,000				
	----------	40,000			
		2,92,000			2,92,000

From the above information, calculate:

i) Working capital
ii) Capital employed
iii) Current ratio
iv) Acid-test ratio

<u>Solution</u>:

i) Working capital = Current asset –Current liability
=Tk. 60,000-Tk. 40,000
= Tk. 20,000

ii) Capital employed = Shareholders fund + bond
= Tk. 2,04,000 +48,000
= Tk.2,52,000

iii) Current ratio = $\frac{\text{Current asset}}{\text{Current liability}}$

$= \frac{60,000}{40,000}$

=1.5

iv) Acid test ratio = $\frac{\text{Current assets – stores - inventory}}{\text{Current liability –bank overdraft}}$

$$= \frac{60{,}000 - 12{,}000 - 32{,}000}{40{,}000 - 12{,}000}$$

$$= \frac{16{,}000}{28{,}000} = 0.57$$