Corporate accounting

3rd semester BBA

Submitted By;

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BBA3BO4 - CORPORATE ACCOUNTING

Lecture Hours per week: 6 **Credits: 4**

Internal: 20: **External: 80**

Objectives: The course acquaints the students with the knowledge about corporate accounting. The modules introduce the fundamental Indian accounting standard and equip the students with skills for preparing corporate accounts.

Learning outcomes: On completing the course students will be able to:

1. Understand and apply fundamental IndASs on inventories, PPE, provisions, income tax, borrowing cost and intangible assets
2. Prepare annual financial statements for companies and compute accounting ratos.
3. Record accounting transactions in respect of redemption of preference shares and debentures

Module I : Financial Reporting Standards: Concept of accounting standard - International Financial Reporting Standards (IFRS) and Indian Accounting Standards- IFRS convergence in India - List of IFRS and IndAS with objectives - Conceptual framework - Elements of financial statements -

Recognition, Measurements, Presentation and Disclosure. **10 Hours**

Module II : IFRS Converged Indian Accounting Standards: Concept of IndAS- Objective,Scope, Recognition and Measurement of :Inventories (Ind AS 2), Income tax (IndAS 12), Accounting for tangible non-current assets (IndAS 16), Borrowing costs (IndAS 23), Provisions, Contingent liabilities and Contingent assets (IndAS 37), Accounting for intangible assets (IndAS 38).(Basic problems only) **20 Hours**

Module III : Redumption of Securities: Redemption of Preference Shares – Rules and Accounting - Redemption of Debentures – Important Provisions - Accounting for Redemption: by conversion, by lot, by purchase in the open market (cum- and ex-interest). **15 Hours**

Module IV : Preparation of Financial Statements: Contents of financial statements of a joint stock company as per the Companies Act 2013 - Preparationof Statement of Profit & Loss,Statement of changes in equity,Balance Sheet(IndAS1) and Cash flow statement (IndAS7). **20 Hours**

Module V : Accounting Ratios: Concept of ratio – Accounting ratio – Meaning, Uses and

Limitations – Classification of Accounting Ratios - Computation of Profitability Ratios, Liquidity

Ratios, Solvency Ratios and Activity Ratios. **15 Hours**

(Theory and problems may be in the ratio of 30% and 70% respectively)

Reference Books:

1. Chintan Patel, BhupendraMantri, Indian Accounting Standards, Taxmann Publications.
2. T. P, Ghosh , Illustrated Guide To Indian Accounting Standards, Taxmann Publications.
3. B. D, Chatterjee, Illustrated Guide To Indian Accounting Standards, Taxmann Publications.
4. M.C. Shukla, T.S. Grewal and S. C. Gupta, Advanced Accounts, S. Chand &Co., New Delhi.

Module 1

INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

IFRS is an abbreviation for International Financial Reporting Standards. It covers full set of

Principles and rules on reporting of various items, transactions or situations in the financial statements. It is principle based accounting.

Features of IFRS

- Global accounting standards
- Principle based not rule based
- IFRS are developed and maintained by IASB
- These are issued with the intention of globalization of accounting standards
- They ensure high quality transparent reporting
- Every standard has a specific structure to ensure uniformity and facilitates reading, Interpretation, and application

IFRS Adoption / IFRS Convergence

It means adoption of international reporting standards as it is, i.e.in toto. “IFRS convergence” means accounting standards of a country converged with IFRS . Indian Accounting Standards converged with IFRS are known as Ind –Ass.35 Indian Accounting Standards converged with

IFRS

Need for IFRS Convergence

There is need for set of uniform and consistent accounting norms to ensure transparency and comparability in financial statements across the globe. The need of IFRS adoption or convergence due to the following developments :-

- Financial globalisaton
- Multinational corporations
- Accounting Profession
- Government and Revenue Authorities

Benefits of Adopting IFRS

- Benefits to economy:- It facilitates international business.It helps to develop industrial and capital markets in the country.
- Benefits to investors:- Convergence with IFRS also develops better understanding of financial statements globally.
- Benefits to industry :- Financial statements will be more transparent and reliable.
- Benefits to accounting professionals:- Accounting professional can provide their services throughtout the world.
- Benefits to tax authorities and researchers:- It helps in uniformity in reporting to Interested group.

Indian Accounting Standards (Ind –AS)

Indian accounting standards converged with IFRS are known as Ind-AS. In short,

Ind AS is the Indianised version of IFRS

Difference between IFRS and Ind – AS

1.IFRS is based on fair value concept.But,Ind-AS are based on historical cost

2. Financial statements under IFRS and Indian accounting standards differ in form and substance.

3. Under IFRS past errors are incorporated in the accounts of the years it pertains to, even if audited and adopted by shareholders. But, these are treated as adjustments in the current year under Indian accounting standards.

4. Depreciation on revalued assets needs to be routed through income statements under IFRS. But Indian Accounting standards disallow such a treatment.

5. Certain Indian standards offer accounting policy choices. These are not available under IRFS, eg., use of pooling of interest method in accounting for amalgamation.

6. Indian accounting standard define assets by classes which can be depreciated at given rates, whereas IFRS promotes the concept of components of fixed assets based on their usefulness.

7. Under IFRS, prior period items will be given retrospective effect in opening equity. Under Indain AS, it is not so.

8. Proposed dividend is not required to be reflected in financial statements under IFRS. But this is required to be reflected in financial statement under Indian AS.

9. Under IFRS, EPS has to be disclosed separately for continuing and discontinuing operations.

This is not required under Indian AS.

10. Under IFRS, provision made for dismantling of assets or for site closure can be capitalized. But under IAS, this cannot be capitalized.

CONCEPTUAL FRMEWORK FOR IFRS

Accounting needs a conceptual framework. There is also a framework for the preparation and presentation of financial statements.

Meaning of Conceptual Framework

A framework is the foundation of accounting standards. A conceptual framework acts as a constitution for the standard setting process. Concepts are the groundwork, the basis, the foundation upon which the superstructure of standard can be created.

Elements of Conceptual Framework

1. Objective: - The objective of financial statement is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decision.

2. Users:- Investors, employees, lenders, suppliers, and other traders, customers, government and their agencies, public, management and others.

3. Underlying assumptions:- accrual basis and going concern.

4. Qualitative characteristics:- Understandability, relevance, materiality, reliability, faithful representation, substance over form, neutrality, prudence, completeness and comparability.

5. Elements of financial statement:- Assets, liabilities, equity, income and expenses.

6. Concepts of capital maintenance:- both financial and physical concepts of capital have been listed.

REQUIEMENTS OF IFRS/Ind ASs

1. Statement of financial position

2. Statement of comprehensive income . 3. Statement of changes in equity.

4. Cash flow statement

5. Comparative information
6. Present all non owners changes in equity (ie comprehensive income) either in one statement of comprehensive income or in two statement (a separate income statement and a statement of comprehensive income).

7. Present a statement of financial position(balance sheet)

8. Present a statement of cash flow.

9. Make necessary disclosure by way of a note.

FINANCIAL ELEMENTS

Financial elements are the important parts of conceptual framework. Some elements are directly related to the measurement of the financial position. Other elements are directly related to the measurement of financial performance.

Meaning of Financial Elements

Financial Elements simply means the elements of financial statements. In other words, financial elements are the elements from which financial statement and other form of financial reports are to be constructed.

Definitions of Financial Elements

- Assets:- Assets are the resources controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity.
- Liabilities :- liabilities are the present obligations of an entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.
- Equity:- equity is the residual interest in the assets of an entity after deducting all of its liabilities. Equity is otherwise known as shareholders fund. Income:
- -Income is the increase in economic benefits during the accounting period in the form of inflow or enhancements of assets, or decrease of liabilities that result in an increase in equity.
- Expenses:- expenses are decreases in economic benefits during the accounting period in the form of outflows or depletion of assets, or incurrence of liabilities that result in decreases in equity.

Module 2

Redemption of debentures.

Redemption of debentures means repayment of the debentures. It is the discharge of the liability on account of the debentures. Debentures can be redeemed either at par or at a premium.

Journal entries at the time of issue of debentures: -

[i]Issue at par and redemption at par

Bank a/c Dr

To debentures a/c

[ii]Issue at discount and redemption at par

Bank a/c Dr

Discount on issue of debentures a/c Dr

To debentures a/c

[iii]Issue at premium and redemption at par

Bank a/c Dr

To debentures a/c

To securities premium a/c

[iv]Issue at par and redemption at premium

Bank a/c Dr

Loss on issue of debentures a/c Dr

To debentures a/c

To premium on redemption of debentures a/c

[v]Issue at discount and redemption at premium

Bank a/c Dr

Loss on issue of debentures a/c Dr (discount on issue + premium on redemption)

To debentures a/c

To premium on redemption of debentures a/c

[vi]Issue at premium and redemption at premium

Bank a/c Dr

Loss on issue of debentures a/c Dr

To debentures a/c

To securities premium a/c

To premium on redemption of debentures a/c

Journal entries at the time of redemption:-

*In situations **[i]** to **[iii]***

1. Debenture a/c dr

   To Debenture holders a/c

2. Debenture holders a/c dr

   To bank a/c

*In situations **[iv]** to **[vi]***

1. Debenture a/c dr

   Premium on redemption a/c dr

To Debenture holders a/c

2. Debenture holders a/c dr

To bank a/c

Writing off discount/loss on issue of debentures

Discount or loss on issue of debentures is a capital loss.it can be written off by debiting it to share premium a/c(section 78 of the companies act).the following two procedures are used.

[i] fixed instalment method

In case debentures are redeemable after the expiry of a certain specific period in lumpsum, the amount of discount can be equally apportioned to different years of debentures tenure.

The entry to write off discount every year is-

Profit and loss a/c Dr

To discount/loss on issue of debentures

[ii] fluctuating instalment method (proportion method)

When debentures are redeemed by annual drawings or instalments, the total discount or loss on issue of debentures should be written off during the life of debentures in proportion to the debentures outstanding at the beginning of each year.

Disclosure of discount or loss on issue of debentures in balance sheet

It is shown under 'Assets' under the heading "other Current/Non-current Assets' as unamortized expenses till it is written off.

Problem 1(issue of debentures)

Journalize the following transactions relating to the issue of debentures

- ★ A debenture issued at ₹95,repayable at ₹100
- ★ A debenture issued at ₹95,repayable at ₹105
- ★ A debenture issued at ₹100,repayable at ₹105
- ★ A debenture issued at ₹105,repayable at ₹100

Note: the face value of each debenture is ₹100

Problem 2(issue and redemption of debentures)

Bhavana Co ltd issued the following debentures. Pass journal entries in the books of the company in connection with the issue and redemption of debentures.

1. 14% debentures of ₹4,00,000 issued at par and redeemable at par.
2. 14% debentures of ₹4,00,000 issued at a discount of 10% but redeemable at par.
3. 14% debentures of ₹4,00,000 issued at a premium 0f 10% but redeemable at par.
4. 14% debentures of ₹4,00,000 issued at a par but redeemable at a premium of 10%
5. 14% debentures of ₹4,00,000 issued at a discount of 10% and redeemable at a premium of 10%
6. 14% debentures of ₹4,00,000 issued at a premium of 10% but redeemable at a premium of 10%

Problem 3(fixed instalment method)

A limited company issued 20000 debentures at a discount of 5%, repayable at the end of 5 years.

Show the Discount Account in the ledger for the period.

Problem 4(fluctuating instalment method)

On 1st January 2010, a limited company issued debentures of the value of ₹1,00,000 at a discount of 6%.the debentures were repayable by annual drawings of ₹20,000 made on 31st December each year. The directors decided to charge discount each year with an amount proportionate to debentures outstanding in the year.

Show the Discount Account in the Company's Ledger for the duration of the debentures.

Sources of funds for redemption of debentures

3. Out of fresh issue of shares or debentures
4. By utilization of a part of capital
5. By utilization of profits(accumulated profits)
6. By conversion into shares or debentures
7. Out of proceeds from sales of fixed assets.
8. By purchase of own debentures.

Methods of redemption of debentures

- ★ Redemption by lump sum payment.
- ★ Redemption by annual instalment payment.
- ★ Redemption by sinking fund method.
- ★ Redemption by insurance policy method.
- ★ Redemption by purchase of own debentures in open market
- ★ Redemption by conversion into shares or debentures

Methods of redemption of debentures

1. **<u>Payment in lump sum</u>**

   The whole amount is paid to the debenture holders in lump sum at the end of a stipulated period.

1. *<u>Redemption out of capital</u>*

When profits are not used in the redemption of debentures, then it is said to be redemption out of capital. This would affect the working capital of the company.

Now it is not possible to redeem debentures purely out of capital. Asper guidelines of SEBI and section 71(4) of Companies Act 2013, it is compulsory to create a Debenture Redemption Reserve (DRR) by an amount equal to 25% (1/4) of the face value of debentures before starting redemption.

According to 18(7) of the Companies (Share Capital and Debenture Rules) issued by the Ministry of Corporate affairs (MCA), the DRR is not required to be created by,

a) All India Financial Institutions regulated by RBI and

b) the banking companies.

c) Non-banking Financial Companies (NBFCs)covered under section 2(72) of the Companies Act

Journal entries for redemption of Debentures out of Capital

(a) When debentures are redeemed at par

(i)Debentures a/c Dr

To Debenture holders a/c

(ii) Debenture holders a/c Dr

To Bank a/c

(b) *When debentures are redeemed at premium*

(i) Debentures a/c Dr

Premium on redemption a/c Dr

To Debenture holders a/c

(ii) Securities Premium Reserve/General reserve/P/L a/c Dr

To Premium on redemption a/c

[on the assumption that premium on redemption has not been provided at the time of issue]

(iii)Debenture holders a/c Dr

To Bank a/c

(c) *When debentures are redeemed at discount (a rare possibility)*

(i)Debentures a/c Dr

To Debenture holders a/c

To Capital Reserve a/c

(ii) Debenture holders a/c Dr

` To Bank a/c

Problem

Sun Ltd wants to redeem ₹2,00,000 of the face value of 6% debentures after 5 years from the date of issue. Pass the necessary journal entries at the time of redemption if :(a) the debentures are redeemed at par, (b) the debentures are redeemed at a premium of 10%. (c) the debentures are redeemed at a discount of 5%.

2. *Redemption of debentures out of Profit / Surplus*

When sufficient profits are transferred from Statement of P/L to the Debenture Redemption Reserve Account at the time of redemption of debentures, such redemption is said to be out of profits.it reduces the profits available for dividend.

As per section 71(4) of the Companies Act 2013, the new provisions regarding this are: -

1. The company should create DRR at least 25%of the face value of debenture.
2. DRR shall be created out of the profits available for payment of dividend
3. Every company required to create DRR shall invest on or before 30th April in each year, a sum which shall not be less than 15% of the amount of its debentures maturing during the year ending on 31st march of the next year in any of the following methods: -
    3. In deposits with any scheduled bank, free from any charge or lien;
    4. In unencumbered securities of Central Government or of any State Govt.
    5. In unencumbered securities mentioned in sub-clauses (a) to (d) and (e) of section 20 of the Indian Trusts Act,1882;
    6. In unencumbered bonds issued by any other company which is notified under subclause (f) of section 20 of the Indian Trusts Act,1882;

The amount invested above shall not be used for any purpose other than for redemption of debentures and shall not at any time fall below 15% of the amount of debentures.

4. In case of partly convertible debentures, DRR shall be created in respect of non-convertible portion.

5. The amount credited to the DRR shall not be used for any purpose other than for redemption of debentures.

SEBI's Guidelines

1. Every company shall create DRR in case of debenture redeemable after a period of more than 18 months from the date of issue
2. Creation of DRR is obligatory only for non convertible debentures and non convertible portion of partly convertible debentures.
3. Company shall create DRR equivalent to at least 25% of the amount of debenture issue before starting the redemption of debenture
4. Withdrawal from DRR is permissible only after 10% of the debenture liability has already been reduced.
5. In case of redemption of debentures fully out of profits/surplus, 100% of the face value of issued debentures should be transferred from P/L to DRR.

Accounting treatment (Journal entries)

9. *For investing the amount so appropriated in the debenture redemption investment (i.e., at least 15%)*

Debenture Redemption Investment a/c Dr

To Bank a/c

10. For receiving interest on DRI a/c

Bank a/c Dr

To Interest on Debenture Redemption Investment a/c

11. *For realizing the amount invested in DRI a/c*

Bank a/c Dr

To Debenture Redemption Investment a/c

To Debenture Redemption Reserve a/c

12. For creation of DRR

Statement of Profit and Loss(surplus) Dr

To Debenture Redemption Reserve a/c

13. For making payment to the debenture holders

(entries already discussed)

After redemption of all debentures balance of DRR should be transferred to General reserve a/c.The entry is :

Debenture Redemption Reserve ac Dr

To General reserve a/c

Note : if the company has any balance in its DRR a/c and this balance is not equal to 25% of the nominal value of redeemable debentures, then, only the balance to make it 25% should be transferred to DRR a/c.

2. **Redemption of debentures by annual drawings or installments**

(d) When redemption is made by annual installments

It is also called lottery method of redeeming debentures (i.e. Drawing by lots)

There are two methods

7. *Redemption out of capital*

- When the debentures are redeemed out of current sources of the company.

This would adversely affect the working capital of the company.

Note: it is compulsory to transfer at least 25% of the total amount of redeemable debentures to DRR before redemption. i.e. redemption fully out of capital is not possible now.

8. *Redemption of debentures out of Profit / Surplus*

- When the amount payable is charged out of surplus from P/L statement.

Note: if it is not specified whether redemption is out of profit or capital, then it should always be supposed to be out of profits.

Accounting treatment

Accounting entries will be similar as recorded earlier.

Problem

A Ltd issued 4,000, 11% debentures of ₹100 each on April 1, 2016 at a discount of 5% redeemable at premium of 10% in equal annual drawings in 4 years out of capital.

Give journal entries both at the time of issue and redemption of debentures. (Ignore the treatment of loss on issue of debentures and interest).

Module 3

Redemption by sinking fund

Every year a part of the profit is set aside and sinking fund is created. The sinking fund is invested in outside securities like shares and debentures of other companies. Interest received on such investment will again be invested. This process continues till the date of redemption. The investment will be sold and cash thus received will be used for redemption, so the working capital will not be affected. Under this method, sinking fund account and sinking fund investment account will be opened. After redemption, balance in sinking fund account is transferred to general reserve.
[in this case company need not create DRR and deposit 15%of the amount to be redeemed]

Merits:-

i) Liquid cash is available for redemption without disturbing financial position.
ii) In case of emergency, the security maybe pledged or sold out to get cash.

Demerits:-

i) Chance of loss in realizing investments.
ii) ROI may be less than the earning rate.
iii) Shareholders get a comparatively low rate of dividend.

3. **Insurance policy method.**

Under this method, an insurance policy is purchased by paying annual premium. Such policy will mature on the date when the Debentures become redeemable. The policy amount will be equal to the amount required for redemption. The difference between the policy amount and premium paid will be interest on premium (or profit on realization of policy).

This method:

i. Provides funds for redemption., and
ii. Covers the risk involved in the transaction.

5.Redemption by purchase of own debentures from the open market.

A company can buy its own debentures if it is authorized by its articles. When a company purchases own debentures it becomes redemption of debentures. This purchase may be paid from sinking fund or out of profit or out of capital.

This method is used when:

(iv) The rate of interest is higher than the market interest rate.

(v) The market price of debentures falls below the face value

(vi) Sufficient amount is available in surplus fund.

Advantages:-

iv) Company gets profit when market price of debentures is the lowest.

v) It reduces the burden of loan.

vi) It reduces the interest burden.

vii) It avoids the payment of premium on redemption.

Purposes of purchase of Own Debentures

The debentures may be purchased either for

a) Immediate cancellation, or for

b) Investment.

a) Purchase of Own Debentures for Immediate Cancellation.

When debentures are cancelled immediately, there may be profit to the company either because of purchase at lower price or because of saving the redemption premium. Both gains should be transferred to 'profit on purchase/redemption of debentures a/c'.

Accounting treatment.

9. *When debentures (redeemable at par) are purchased at par or at nominal value.*

Debentures A/c	Dr. (with nominal value)
Bank A/c	

(**Note:-** Creation of DRR should be done)

10. *When debentures (redeemable at premium) are purchased at par or nominal value.*

Debentures A/c	Dr.(with nominal value)
Premium on redemption of Debentures A/c	Dr.

To Bank A/c

To profit on redemption of Debentures (premium on redemption saved)

For transferring profit on redemption to capital reserve.

Profit on Redemption /Purchase of Debentures A/c Dr.

To Capital Reserve

[Note:- when there is sinking fund, the profit should be credited to sinking fund A/c and not to Capital Reserve A/c]

Problem

X Ltd had issued 50,000 Debentures of ₹100 each at par redeemable at 20% premium. The company purchased 5,000 debentures from the open market for immediate cancellation at ₹100 each just after the due date of debenture interest. Pass the journal entries for purchase of own debentures for immediate cancellation.

11. *When Debentures (redeemable at par)are purchased at a discount(i.e., less than nominal value)*

(a) Debentures A/c Dr. (nominal value)

To Bank A/c (with purchase price)

To Profit on Purchase/Redemption of Debentures. A/c (with profit on purchase)

(b) Profit on purchase /redemption of debentures A/c Dr.

To Capital Reserve.

Problem

A Ltd had issued 50,000 debentures of ₹100 each redeemable at par. The company purchased 5,000 debentures from the open market for immediate cancellation at ₹95 each just after the due date of debenture interest. Pass the journal entries for purchase of own debentures for immediate cancellation.

12. When debentures(redeemable at premium)are purchased at less than nominal value on the due date of interest.

(a) Debentures A/c Dr.(nominal value)
Premium on redemption of debentures A/c Dr.
To Bank A/c (with amount paid)
To profit on redemption/purchase of debentures A/c (with both gain,i.e.,premium saved + difference in purchase value and face value)

(b) profit on redemption/purchase of debentures A/c Dr
To Capital Reserve

[‘profit on cancellation of debentures’ can also be used in the place of profit on redemption]

Problem

On 1st April 2018, A Ltd had issued 5,000 debentures of ₹100 each at par. These debentures are redeemable at premium of 10%. Out of these, debentures of the face value of ₹1,00,000 are to be redeemed every year commencing from March 31,2020, either by purchase from open market or by drawing of lots. The company created DRR and invested the required amount as per law.

On March 31st 2020,the company purchased debentures of the face value of ₹1,00,000 at ₹85 each for immediate cancellation. Give journal entries for redemption of debentures during the year 2019-20

13. When debentures (redeemable at par) are purchased at more than nominal (i.e., at premium)on the due date of interest.

Debentures A/c Dr. (with nominal value)
Loss on Redemption/purchase of Debentures Dr. (with excess amount paid)
To Bank A/c

To write off loss on redemption of debentures

Capital reserve A/c Dr.(if exists)
Securities Premium Reserve A/c Dr.(if exists)

Statement of Profit and Loss Dr.

To Loss on Redemption/purchase of Debentures

[**Note:-** when there is sinking fund, the loss should be debited to Sinking Fund A/c]

Problem

On 1st April 2018, A Ltd had issued 5,000 debentures of ₹100 each at par. These debentures are redeemable at par. Out of these, debentures of the face value of ₹1,00,000 are to be redeemed every year commencing from March 31,2020, either by purchase from open market or by drawing of lots. The company created DRR and invested the required amount as per law.

On March 31,2020, the company purchased debentures of the face value of ₹1,00,000 at ₹105 each for immediate cancellation. Give journal entries for redemption of debentures during the year 2019-20.

14. *When debentures (redeemable at premium)are purchased at more than nominal value(i.e.,at premium)on the due date of interest.*

Debentures A/c Dr.(nominal value)

Premium on redemption of Debentures A/c Dr.

Loss on Redemption/purchase of Debentures A/c Dr(excess amount paid)

To Bank A/c

To Profit on redemption/purchase of Deb.a/c

If the gain is greater than the loss, the net profit is transferred to capital reserve. The entry is:

Profit on redemption/purchase of Deb.a/c (gain)

To Loss on Redemption/purchase of Debentures A/c(loss)

To Capital Reserve A/c (balance or difference)

If the loss is greater than the premium, then there is net loss and it should be written off. The entry is:

Profit on redemption/purchase of Deb.a/c (gain) Dr.

Capital reserve/Securities premium reserve/profit or surplus Dr(loss-gain,i.e.,net loss)

To Loss on Redemption/purchase of Debentures A/c

Problem(case of profit)

On 1st April 2018 A Ltd had issued5,000 debentures of ₹100 each at par. These debentures are redeemable at 10% premium. Out of these, debentures of the face value of ₹1,00,000 are to be redeemed every year commencing from March 31, 2020,either by purchase from open market or by drawing of lots. The company created DRR and invested the required amount as per law.

On March 31,2020,the company purchased debentures of the face value of ₹1,00,000 at ₹106 each for immediate cancellation. Give journal entries for redemption of debentures during the year 2019-'20.

Problem (case of loss)

On 1st April 2018,A Ltd had issued 5,000 debentures of ₹100 each at par. These debentures are redeemable at 10% premium. Out of these, debentures of the face value of ₹1,00,000 are to be redeemed at every year commencing from March 31,2020,either by purchase from open market or by drawing of lots. The company created DRR and invested the required amount as per law.

On March 31,2020,the company purchased debentures of the face value of ₹1,00,000 at ₹115 each for immediate cancellation. Give journal entries for redemption of debentures during the year 2019- ' 20.

Ex-interest and Cum-interest quotations

If a company purchases its own debentures on the date of payment of interest, there will be no problem with regard to interest. If the debentures are purchased before the due date of the interest payment, then the problem arises as to whether the price paid includes interest for the expired period or not. There are two types of quotations –

Cum – interest quotation and

Ex – interest quotation.

Cum – interest Quotation

If the purchase price includes interest for the period from previous date of interest to the date of purchase, it is called cum interest price ['Cum'(latin word) means 'with' i.e. Cumulative or inclusive of interest].

Journal entries

(a) *When the debentures are purchased for immediate cancellation:*

Debentures A/c Dr.(nominal value of debentures)

Interest on Debentures A/c Dr.(interest for expired period)

To Bank (amount paid)

To Profit on redemption of debentures (profit on redemption)

(b) *When the debentures are purchased for holding as investment:*

Own Debentures A/c Dr. (cost of debentures)

Interest on Debentures A/c Dr.(interest for the expired period)

To Bank A/c (amount paid)

Here ;

Cost of Own Debentures = Price paid – Interest for the expired period.

(c) *When own debentures purchased for investment are cancelled in future*

Debentures A/c Dr.(nominal value)

To Own Debentures A/c (cost, i.e., price paid minus interest)

To Profit on Redemption of Debentures (balance)

Ex – interest Quotation

If the purchase price excludes the interest for the expired period, it is called Ex-interest price [
'Ex' (Latin word) i.e., exclusive of interest]. This means the purchaser(company) has to pay, in addition, the interest for the expired period. Thus;

Cost of own Debentures = Price paid

Module 4

CORPORATE ACCOUNTING

CASH FLOW STATEMENT

Meaning of the term cash

The term 'cash' includes cash and cash equivalents. These include cash in hand, cash at bank and short term investments or marketable securities.

Meaning of cash flow statement

Cash flow statement is a statement which describes the inflows and outflows of cash and cash equivalents in an enterprise during a specified period of time. It explains the reasons for changes in a firm's cash position during an accounting year. The Institute of Cost and Works Accountant of India defines cash flow statement as a statement setting out the flow of cash under distinct heads of sources of funds and their utilization to determine the requirements of cash during the given period and to prepare for its adequate provision.

" The term cash, cash equivalents and cash flow are explained as follows:-

1. Cash comprises of cash in hand and demand deposits with banks

2. Cash equivalents are short term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value.

3. Cash flows are inflows and outflows of cash and cash equivalents.

Cash inflow means …cash into the organization

Cash outflow means …cash out from the organization

CASH FLOW STATEMENT	FUNDS FLOW STATEMENT
1. Cash flow statement is a statement which	1.fund flow statement is a statement which

discloses the inflows and outflows of cash during a period	discloses the sources and uses of funds or working capital during a period
2. It is prepared on cash basis, that is, actual cash inflows and outflows are shown	2. It is prepared on working capital basis and follows accrual concept of accounting
3 It is mainly used for cash planning and managing liquidity	3. It is mainly used for long term financial planning
4. It explains reasons for shortage or surplus of liquid cash at the end of an accounting year	4. It explains reasons for a net increase or decrease in working capital at the end of an accounting year
5. It is presented in prescribed format as per Ind AS 7	5. It is not presented in prescribed format
6. A schedule of changes in working capital is not required.	6. A schedule of changes in working capital is prepared to ascertain the net increase or decrease in working capital

USES OF CASH FLOW STATEMENT

1. A Cash flow statement discloses changes in financial position on cash basis.
2. It facilitates management in the evaluation of cash position
3. It helps management in formulating financial policies such as dividend policy, credit policy etc

. CLASSIFICATION OF CASH FLOWS

The revised Accounting Standard(Ind AS 7) has made the following classification in respect of cash flows

. 1. Cash flows from operating activities

2. Cash flows from investing activities

3. Cash flows from financing activities

1. Cash flow from operating activities

These are cash flows from regular course of operations. The operations of a firm include manufacturing, trading, a. Cash sales b. Cash received from debtors on account of credit sales c. Cash purchase of goods d. Cash paid to suppliers on account of credit purchases e. Wages paid to employees and staff f. Cash operating expenses g. Income from investing activities

2. Cash from investing activities

The investing activities of a business include purchase and sale of fixed assets like land buildings, equipments, machinery etc. Acquisition or disposal of companies also comes under investing activities. These are separately discloses in cash flow statement Eg. a. Cash payments to acquire fixed assets b. Cash receipts from disposal of fixed assets c. Cash payments to acquire shares, debt instruments or warrants d. Cash receipts from disposal of shares e. Cash advances and loans made to third parties

3. Cash flows from financing activities

The financing activities of a firm include issuing or redemption of share capital, issue and redemption of debentures , raising and repayment of long term loans etc. these are items changing the owners equity and debt capital during an accounting year. Dividends paid to shareholders also come under this category.

PREPARATION OF CASH FLOW STATEMENT .

The following steps are involved in the preparation of cash flow statement.

1. Prepare all non-current accounts and ascertain inflow or outflow of cash

2. Calculate cash from operations for current year

3. Prepare cash flow statement

MODULE 2

IFRS CONVERGED INDIAN ACCOUNTING STANDARDS

Assets are broadly classified into two – tangible and intangible asset. Intangible asset cannot be seen and touched. But these have value.

This chapter deals with the following assets-based accounting standards.

1. Inventories (IAS 2 & Ind AS 2)
2. Property, plant and equipment (Ind AS 16 & IAS 16)
3. Intangible assets (Ind AS 38 & IAS 38)
4. Impairment of Assets (Ind AS 36 & IAS 36)
5. Borrowing cost (IAS 23 & Ind AS 23)
6. Investment property (IAS 40 & Ind AS 40)

Accounting for inventories

Accounting for inventories is based on the matching concept. As per this concept,inventories should be accounted for an expense in the year in which it is sold., ie, closing stock. It is also credited in the statement of profit and loss.

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Objectives

The objective of this standard is to prescribe the accounting treatment for inventories.

This standard deals with determination of cost and its subsequent recognition as an expense, including any write down to net realizable value

.

Scope

This standard applies to all inventories except the following

a. Work in progress under a construction contract

contracts)

b. Financial instruments, e.g., share, debentures, bonds

c. Biological assets related to agricultural activity and agricultural produce at the point of harvest

.

Definition of inventories

Inventories are assets that are

1. Held for sale 2. Being prepared for sale3. Materials to be used in the production process or provision or services. Inventory includes raw materials, production supplies, work in progress, finished goods and goods in salable condition(i.e., ready to sell goods that have been purchased for resale.)

Accounting treatment

Measurement of inventories

Inventories must be measured at cost or net realizable value, whichever is less. Thus,the two components are cost and net realizable value.

Cost of inventories

The cost of inventories comprises

1. Cost of purchase
2. Cost of conversion
3. Other costs incurred in bringing the inventories to their present location and condition.

Cost of purchase

1. Purchase price
2. Import duties and other taxes
3. Transport cost
4. Handling cost
5. Other cost directly attributable to the acquisition of finished goods, materials andservices

b) Cost of conversion: Costs of conversion of inventories include direct costs such as direct labour, and systematic allocation of production overhead incurred in converting materials intofinished goods. Production overhead consists of fixed production overheads and variable production overheads

c) other cost

Other cost to be included in the cost of inventory are those which are incurred inbringing the inventories to their present location and condition. These costs include inward transport and storage prior to completion of production and specific design work required for a special client.

PROPERTY, PLANT AND EQUIPMENT (Ind AS 16 and IAS 16)

Definition

:Property, Plant & Equipment are tangible items that:-

a. are held for use in the production or supply of goods or services, or-

b. for rental to others, or

c. for administrative purposes; and

d. are expected to be used during more than one period.

Recognition:

The cost of an item or Property, Plant & Equipment shall be recognized as an asset if, and only if:

a) it is probable that future economic benefits associated with the item will flow to theentity; and

b) The cost of the item can be measured reliably.

Measurement at Recognition

An item of Property, Plant & Equipment that qualifies for recognition as an asset shall be measured at its cost.

Elements of Cost:

a. Purchase price + (Import duties + Non refundable taxes) - (Trade Discounts +Rebates)

b. Directly attributable costs.

c. Initial estimate of the cost of dismantling and removing the item and restoring the site in which it is located.

Costs that are not Costs of Property, Plant & Equipment:

a. Costs of opening new facility;
b. Costs of introducing new product or service;
c. Costs of conducting business in new location or with new class of customer;
d. Administration and other general overhead costs;
e. Costs incurred in using or redeploying an item;
f. Amounts related to certain incidental operations

Measurement of element of cost

a. Cost : cost is the amount of cash or cash equivalents paid to acquire an asset at the time of its acquisition or construction.
b. When the payment is deferred: if payment is deferred beyond credit terms, the difference between the cash price equivalent and the total payment is recognized as interest over the period of credit unless such interest is capitalized in accordance with Ind AS 2

Intangible Assets (Ind AS 38 and IAS 38)

Intangible assets are assets not having any physical substance. Therefore, they cannot be seen and touched.

Objective

The objective of this Standard is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another Standard.

Scope

Ind AS 38 applies to all intangible assets other than:

Financial assets exploration and evaluation assets expenditure on the development and extraction of minerals, oil, natural gas, and

Similar resources intangible assets arising from insurance contracts issued by insurance companies intangible assets covered by another Ind AS, such as:

Intangibles held for sale

Deferred tax assets

Lease assets

Assets arising from employee benefits plan

Goodwill acquired under business combination.

Definition

An intangible asset is an identifiable non-monetary asset without physical substance.

Accounting treatment

Initial recognition as an asset impairment losses. The revaluation of assets is not allowed, but some accounting standards allow recovery of impairment losses recognized in the past

Revaluation model

Under the revaluation model, an item of property, plant and equipment whose fair value can be measured reliably is carried at a revalued amount, which is its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent Accumulated impairment losses.

Internally generated intangible assets

It may be difficult to identify but certain criteria should be followed to identify. These are
Research Phase:- Research cost recorded as an expenses when it is incurred This is because no intangible assets is created in this phase
Development phase:= Expenditure incurred during the development phase is known as development cost

BORROWING COST (IAS 23 & Ind AS 23)

Borrowing costs that are directly attributable to the acquisition, construction orproduction of a qualifying asset form part of the cost of that asset. Other borrowing costs are recognised as an expense.
Objective of IAS 23
The objective of IAS 23 is to prescribe the accounting treatment for borrowing costs.
Borrowing costs include interest on bank overdrafts and borrowings, finance charges on finance leases and exchange differences on foreign currency borrowings where they are regarded as an adjustment to interest costs.

Scope of IAS 23

Two types of assets that would otherwise be qualifying assets are excluded from the scope of IAS 23:
qualifying assets measured at fair value, such as biological assets accounted for under IAS 41
Agriculture inventories that are manufactured, or otherwise produced, in large quantities on a repetitive basis and that take a substantial period to get ready for sale (for example, maturing whiskey)

Definition of borrowing cost

This Standard uses the following terms with the meanings specified:

a. Borrowing costs are interest and other costs that an entity incurs in connection with the borrowing of funds.

b. A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

Accounting treatment

Recognition

1. Borrowing cost to be capitalized

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalized when it is probable that they will bring future economic benefits to the entity and the costs can be measured reliably.

2. Borrowing cost to be charged as an expense

Other borrowing costs are recognized as expenses and written off in the statement of profit and loss in the period in which they are incurred.

Commencement of capitalization

An entity should begin capitalizing borrowing costs on the date when all of the following conditions are met:

a. Expenditure on qualifying asset has begun

b. Borrowing costs are being incurred

c. Activities to prepare the asset for its intended use or sale are in progress

Suspension of capitalization

Capitalization of borrowing cost is suspended during extended periods in which active development is interrupted. This means that borrowing cost should not be capitalized during the extended period. It also suspended when acquisition or construction activities are suspended intentionally. However, capitalization is not suspended in the following cases

a. Temporary delays caused by external forces

b. When substantial technical and administrative work is being carried out

c. When temporary delay is a necessary part of the process of getting an asset ready for its intended use or sale.

Cessation of capitalization

An entity should cease capitalizing borrowing costs when :

a. Substantially all the activities necessary to prepare the qualifying asset for the intended use or sale are complete.

b. The construction is completed in part and the completed part can be independently used, e.g., a business park comprising several buildings, each of which can be used individually

Journal Entries

(a) *When debentures are purchased for immediate cancellation*

Debentures A/c	Dr.	(Nominal value of debentures)
Interest on Debentures A/c	Dr.	(interest for the expired period)
To Bank A/c		(total amount paid,i.e.,cost of debenture + interest)
To Profit on Redemption of Debentures (balancing figure)		

(b) *When debentures are purchased as investment*

Own Debentures A/c	Dr. (cost of debentures,i.e.,price paid)
Interest on Debentures A/c	Dr.(interest for expired period)
To Bank A/c	(Total)

(c) *When Own debentures purchased for investment are cancelled in future*

Debentures A/c	Dr. (nominal value)	
To Own Debentures A/c		(cost,i.e.,price paid)

To Profit on Redemption of Debentures (balance)

Problem 1

On 1^{st} July 2018, a company issued 1,000, 6% Debentures of ₹100 each (interest payable on 30^{th} June and 31^{st} December). The company is allowed to purchase own debentures which may be cancelled or kept or reissued at the company's option. The company made following purchases in the open market for immediate cancellation:

On 31^{st} May 2019, 100 debentures at ₹98 ex-interest

On 30^{th} September 2020, 50 debentures at ₹97 cum interest

Give journal Entries

Problem 2

A Ltd purchases its own 12% Debentures of ₹30,000 at ₹98 on 1.4.2020. interest is payable on 30^{th} June and 31^{st} December every year. Give journal entries in the books of A Ltd. If the quotation is (i) cum-interest, and (ii) ex-interest. The company closes its books on 31^{st} December.

Problem 3

A Ltd cancelled the debentures purchased on 1-4-2020(in the *Problem 2*). Give the entries for cancellation when debentures were purchased on (1) cum- interest basis, and (2) ex-interest basis.

<u>6. Redemption by conversion</u>

It means redeeming the debentures by converting them into new debentures and/or shares with in a stipulated period at the option of the debenture holders. The redemption can be made either at par or at premium but not at discount. However the new debentures may be issued either at par, or at premium or at discount. New shares can be issued at par or at premium, but not at discount.

Legal provisions regarding Redemption by conversion.

i) Non-convertible portion of debentures cannot be redeemed by conversion.

ii) There is no need to create DRR and it is not necessary to invest 15% of the value to be redeemed.

iii) The debenture holders have to apply for this type of redemption.

iv) In case of conversion of debentures originally issued at discount before their redemption date, the Discount on Debentures Account is credited.

v) Those debenture holders who are not willing for conversion are paid in cash.

Advantages

To company

15. Any financial source is not needed for redemption.
16. It has no adverse effect on working capital of the company.
17. Creation of DRR is not required by the company.
18. Investment is not needed for redemption.

To debenture holders

★ They can participate in profits and management of the company.

★ The conversion depends upon the will of debenture holders, not forcibly.

★ They accept this type of redemption in hope of higher interest/dividend.

Accounting treatment

a) ***When debentures are redeemed (by conversion) at par on maturity and new shares/debentures are issued at par:***

3. Debentures A/c (old) Dr.(with nominal value)

    To Debenture holders A/c

    (transfer of debentures to debenture holders)

4. Debenture holders A/c Dr.

    To New Debentures A/c / Share capital A/c

    (issue of new debentures or shares at par)

No. of new shares/debentures to be issued = $\dfrac{\text{Amount Payable}}{\text{Issue price per share or debenture}}$

Problem

A Ltd issued 60,000, 8% debentures of ₹100 each redeemable after 4 years by converting them into equity shares of ₹10 each. Record journal entries for issue and redemption of debentures. Ignore entries for payment of interest.

b) ***When debentures are redeemed (by conversion) at premium at maturity and new shares /debentures are issued at par.***

(vii) Debentures A/c Dr.(with nominal value)
Premium on Redemption of Debentures A/c Dr.
To Debenture holders A/c
(amount due to debenture holders and premium due)

(viii) Debenture holders A/c Dr.
To New Debentures A/c / Share capital A/c
(issue of new debentures or shares at par)

Problem

X Ltd had issued 2000, 8% debentures of ₹100 each at par and redeemable at 10% premium by converting debentures into equity shares of ₹10 each at par. Write journal entry for conversion.

c) ***When debentures are redeemed (by conversion) at par at maturity and new shares /debentures are issued at premium.***

i) Debentures A/c Dr.(with nominal value)
To Debenture holders A/c
(amount due to debenture holders on redemption)

ii) Debenture holders A/c Dr.
To New Debentures A/c / Share capital A/c
To Securities Premium Reserve A/c
(issue of new debentures or shares at premium)

Problem

X Ltd issued 8,000, 9% debentures of ₹100 each at a premium of 5% on April 1, 2018 redeemable at par by conversion of debentures into shares of ₹20 each at a premium of ₹5 per share on March 31,2020. Record necessary journal entries for issue and redemption of debentures.

d) ***When debentures are redeemed (by conversion) at premium at maturity and new shares /debentures are issued at premium.***

iii) Debentures A/c Dr.(with nominal value)

Premium on Redemption of Debentures A/c Dr.

To Debenture holders A/c

(amount due to debenture holders on redemption)

iii) Debenture holders A/c Dr.

To New Debentures A/c / Share capital A/c

To Securities Premium Reserve A/c

(issue of new debentures or shares at premium)

Problem

Y Ltd., had an outstanding balance of ₹9,00,000, 9% debentures of ₹100 each redeemable at a premium of 5%. According to the terms of redemption, the company redeemed 25% of the above debentures by converting them into shares of ₹10 each at a premium of ₹5. Record the entries for redemption of debentures in the books of Y Ltd.

e) ***When debentures are redeemed (by conversion)at par on maturity and new debentures are issued at discount.***

i) Debentures A/c Dr.(with nominal value)

To Debenture holders A/c

(amount due to debenture holders on redemption)

ii) Debenture holders A/c Dr.

Discount on issue of debentures A/c Dr.

To New Debentures A/c

(issue of new debentures at discount)

Problem

X Ltd redeemed 9,600, 12% debentures of ₹100 each by converting them into 15% new debentures of ₹100 each at a discount of 4%. Give necessary journal entries regarding redemption in the books of the company.

f) ***When debentures originally issued at discount are redeemed by conversion:***

Debentures may be redeemed either before maturity or at maturity.

14. Conversion before maturity

The number of shares or debentures to be issued is calculated on the basis of net proceeds (i.e., after deducting the discount from the face value). If this is not applied, the provisions of the Companies Act would be violated.

Journal entries

★ *Redeemable at par by conversion into shares before maturity*

2. *For amount due to debenture holders*

Debentures A/c (old) Dr.(nominal value)

To Discount on issue of debentures A/c (discount not yet written off)

To Statement of Profit and Loss (discount already written off)

To Debenture holders A/c (net amount due)

3. *For issue of shares or debentures at par*

Debenture holders A/c Dr.

To Equity share capital/ Preference share capital/ Debentures A/c

4. *For issue of shares or debentures at premium*

5. Debenture holders A/c Dr.

To Equity share capital/ Preference share capital/ Debentures A/c

To Securities Premium Reserve A/c

Problem

A ltd had issued 2000, 10% debentures of ₹100 each at a discount of 10%. These debentures

were given the option to convert their debentures into equity shares of ₹ 100 each at par. The holders of 400 debentures out of the above exercised the option before maturity. Write journal entry for conversion if : a) new equity shares are issued at par, and b) New equity shares are issued at 20% premium.

15. <u>Conversion of debentures on maturity:</u>

It is converted on the basis of the face value or nominal value and not at its net proceeds. In such cases, the provisions of Companies Act are not violated because the Discount on issue of Debentures has already been written off.

Problem

In 2015 JK Ltd had issued 10% 2,00,000 debentures at discount of 10%. The debentures are redeemable
in 2020. In 2020, the Company gave the debenture holders the option of converting the debentures into
6% preference shares of 100 each at a premium of 25%. One debenture holder holding 25000 debentures exercised the option. Give journal entries for redemption by conversion.

Module 5

ACCOUNTING RATIOS

Ratio Analysis

Ratio analysis is an important technique of anal of financial analysis

Concept of Ratio

A ratio is a relationship between two related figures, expressed mathematically

Meaning of Accounting Ratio

Accounting ratios are ratios calculated from the financial statements. According to J BATTY, "The term accounting ratio is used to describe the significant relationship which exists between figures shown in a Balance Sheet and Profit and Loss Accounting

Expression of Ratio

- Proportion
- Percentage
- Time
- Fraction

Objectives or Purpose of Ratio Analysis

- To study the short term solvency of a firm
- To study the long term solvency of a firm
- To determine the profitability of a firm
- To measure the performance of a firm
- To facilitate the process of financial forecasting
- To facilitate comparison
- To communicate the strength and weakness of a firm
- To enable managerial decision making

Advantages of Ratio Analysis

- Advantages to Management
- Advantages to Shareholders and Investors

- Advantages to Creditors
- Advantages to Employees
- Advantages to Government

Limitations of Accounting Ratios

- Inherent limitations of accounting
- Non-monetary factors ignored
- Qualitative factors ignored
- Not a substitute for judgment
- Need for comparative analysis
- Lack of adequate standards
- Window dressing
- Price level changes

Classification or Types of Accounting Ratios

A Classification According to Financial Statements_____

B Classification According to Nature or Functions_____

A Classification According to Financial Statements

1. Balance Sheet or Financial Ratios
2. Profit and Loss Ratios
3. Combined or mixed ratios

B Classification According to Nature or Functions

1. Liquidity Ratios
2. Leverage Ratios
3. Activity Ratios
4. Profitability Ratios
5. Market Test Ratios

LIQUIDITY RATIOS(SHORT TERM SOLVENCY RATIOS)

The term liquidity refers to the firm's ability to pay its current liabilities out of its current assets. Liquidity ratios are used to measure the liquidity position or short term financial position of a firm. Liquidity ratios are current ratio, quick ratio, super quick ratio.

A). Current Ratios

It is defined as the ratio of current assets to current liabilities.It is also called working capital ratio or banker's ratio.

Current ratio = Current assets / Current liabilities

Components of current ratio

Current assets	Current liabilities
1. Cash in hand	1. Sundry creditors
2. Cash at bank	2. Bills payable
3.Short term securities	3. Outstanding expenses
4. Short term investment	4. Short term advances
5. Bills receivable	5. Provision for tax
6. Sundry debtors	6. Dividend payable
7. Stock of Inventories	7. Bank overdraft
8. Work in progress	
9.Prepaid expenses	

Standard Current Ratio - A current ratio of 2:1 is satisfactory

Significance Of Current Ratio - It indicates the firm's capacity to pay its current liabilities in time

Interpretation - A very high current ratio indicates that too much of money is blocked in current assets.A very low current ratio indicates that the liquidity position is not good and the firm will find it difficult to pay off its debt.

WINDOW DRESSING

It is the practice of improving the current ratio through manipulation of accounts.It may be done in the following ways

1.Increasing the inventory level.

2.Postponed the purchase of fixed assets

3.Selling fixed assets

4.Delaying purchase of inventory on credit

5,Issuing new shares

6.Paying off current liabilities

7.Considering short term liabilities

B) LIQUID RATIO (QUICK RATIO)

It is the ratio of liquid assets to current liabilities.It is also called Acid Test Ratio.

Liquid Ratio = Liquid Assets / Current liabilities

Liquid Assets = Current Assets - Stock and prepaid Expenses

Standard Quick Ratio --1;1 is ideal

Significance of Quick Ratio -- It determines the short term financial position

Interpretation - If the current ratio is higher than 2;1,but quick ratio is less than 1;1 It indicates excessive inventory

LEVERAGE RATIOS (SOLVENCY RATIO)

The solvency refers to the ability of a firm to pay its outstanding liabilities.Important solvency ratios are

a) Debt Equity Ratio, b) Proprietary Ratio, c) Solvency Ratio etc

Debt Equity Ratio

It indicates the relative proportion of debt and equity in financing the assets of a firm It includes Long term Debt Equity Ratio and Total Debt Equity Ratio

Long Term Debt Equity Ratio = Long term debt / Equity

Long term debt =Debenture + Mortgages + All Long term loans

Equity shareholders fund = Equity capital + preference capital + All reserves and surpluses

Total Debt Equity Ratio = Total Debt / Equity

Total Debt = Long term debt + current liabilities

Standard debt equity ratio -- 1:1

Significance -- A high ratio indicates safety to the creditors and low ratio indicates risk to the creditors

Interpretation - A high debt Equity ratio indicates higher proportion of debt content in the

Capital structure

Proprietary Ratio.(Equity ratio or net-worth ratio)

It establishes the relationship between shareholders fund and total asset. It shows how much funds have been contributed by the shareholders in the total asset.

Proprietary ratio = shareholders fund

Total asset

shareholders fund =Equity share+Preference share+all reserves+surplus+undistributed profit

Total asset = Current and non - current asset

Standard proprietary ratio-0.5:1

Significance ----It shows general financial health of the firm.

Interpretation---A high ratio indicates safety to the creditors and low ratio shows the greater risk to the creditors.

Solvency ratio

Solvency ratio= Total assets

Total debts

Total asset =Current asset+Non-current assets.

Total Debt=Long term debt+short term debt

Significance--If the total assets are more than outside liabilities, the firm is treated as solvent.

Interpretation--A higher solvency ratio indicates that the financial position is strong

Fixed asset to networth ratio

Fixed asset to net worth =Fixed asset/proprietors fund

Significance--It indicates the extent to which shareholders funds are invested in the fixed asset. Interpretation--If the ratio is more than one,it will mean that outsiders funds have been used to acquire a part of fixed assets.

Fixed asset ratio

Fixed asset ratio =Fixed asset(after depreciation)/long term fund.

Long term fund=Fixed asset+investments+current asset-current liabilities.

= Equity share +preference share+reserve and surplus+long term liabilities.

Standard fixed asset ratio=0.67:1

Significance---If the ratio is 1:1, it means that entire fixed assets have been purchased out of a long term fund.

Interpretation---Higher ratio indicates that the financial position is not sound.Lower the ratio,better is the financial position.

Capital gearing ratio

It refers to the proportion between fixed income bearing funds and equity shareholders funds.

Capital gearing ratio=Fixed income bearing funds/equity shareholders funds.

ie, Preference Share Capital+Debentures+Long term loans/Equity shareholders' funds. Significance--It reveals the company's capital structure

Coverage ratio

Total coverage ratio=EBIT/Total fixed charges

STOCK TURNOVER RATIO (INVENTORY TURNOVER RATIO)

It indicates the number of times the stock is turned over or converted into sales.

STR = Cost of goods sold / Average Stock

Cost of goods sold = opening stock + purchases + Direct Expenses - closing stock

Or

Cost of goods sold = Sales - Gross profit

Average Stock = Opening Stock + Closing Stock / 2

STOCK VELOCITY = No.of Days or Months in a year / Stock Turnover Ratio

Direct formula for Stock Velocity = Average Stock / Stock Velocity x No.days or Month in a year

Standard Stock Turnover Ratio --- 8 times

Significance -- This Ratio measures how quickly inventory is sold

Interpretation -- A higher Turnover Ratio (or shorter inventory period) indicates that inventory is sold fast ‘ A low turnover ratio reflects over investments in inventory.

Creditors Turnover ratio(Payables turnover ratio)

It is the relationship between net credit purchases and average creditors including bills payable.

Creditors turnover ratio=Net credit purchases/average creditors including bills payable.

Net credit purchase=Total purchases-cash purchases-purchase return.

Average creditors=Opening creditors+closing creditors/2

Average payment period=360(or12)/creditors turnover ratio

Direct Formula for Average Payment Period=Average creditors(including bills payable)/Net credit purchases x365

Significance--It indicates the number of times the creditors are paid in a year.

Interpretation--If the firm enjoys a higher turnover ratio(lower credit period),it means early payment to creditors and the firm is not taking the full advantage of credit facilities.

Debtors turnover ratio

It is the relationship between net credit sale and average debtors including bills receivable.

Debtors Turnover Ratio=Net Credit sales/ Debtors including bills receivable.

Net Credit Sales=Total sales-Cash sales-sales return

Average debtors =Opening debtors+closing debtors/2

Average collection period.

It means the number of days or months for which debtors and B/R remain outstanding.

Average collection period =360(or 12)/ debtors turnover ratio.

Direct formula for average collection period=Av.Drs(includingB/R)/Net credit sales x365(or 12)

Standard DTR=7 times

Significance of DTR--It helps to measure efficiency in management of debtors.

Interpretation of DTR

A higher DTR(or shorter collection period) shows the efficiency in collection from debtors.

Working Capital Turnover Ratio.

Working capital is related with sales.this ratio shows how many times the working capital is turned over(rotated) to generate sales.

WCTR=Net sales/working capital

Net sales =Total sales -Cash sales-Sales return.

Standard- The ideal turnover ratio is 7 or 8 times.

Significance - It indicates whether working capital is effectively used in making sales.

Interpretation- Higher the ratio better is the utilisation of working capital.

Fixed Asset Turnover Ratio.

It measures the efficiency within which a firm is utilising its fixed assets in generating sales.

FATR=Net sales/Net fixed asset

Net fixed asset =Fixed asset- depreciation.

Significance - It indicates how efficiently the fixed assets are utilised.

Interpretation- A higher ratio indicates better utilisation of fixed assets.A low ratio indicates under utilisation of fixed assets in generating sales.

PROFITABILITY RATIOS

Profit is the engine that drives a business enterprise.The term profitability refers to the ability of a firm to earn income.It can be measured by profitability ratios.Main profitability ratios are classified on the basis of a) sales,b) investment.

Profitability ratios based on sales.

1) Gross Profit Ratio

   GPR=Gross Profit/ Net Sales x 100

GP = Net Sales - Cost of goods sold

Cost of goods sold =Opening stock + purchases + wages + all other direct expenses - closing stock.

Objectives :-

a) To measure the efficiency with which a firm produces its products.
b) To determine the selling price
c) To analyse the reasons of significant variations in gross profit ratio over various years.

Standard - The ideal ratio is 20% to 25%.

Significance - It indicates the efficiency of production or trading operation.It is useful in fixing the price of products.

Interpretation - A high GPR is a sign of efficient production otherwise it is a danger signal.

2) Operating Ratio.

OR = Cost of goods sold + operating expenses / net sales x 100 Operating cost = Cost of goods sold + operating expenses.

Standard - The ideal ratio is 75% to 85%

Significance - It helps in controlling the operating cost of the business.

Interpretation - Lower the ratio more is the efficiency and higher is the operating profit.

3) Expense Ratio.

Expense ratio explained the relationship between various expenses to net sales.

a) Cost of goods sold ratio = Cost of goods sold / net sales x 100.
b) Office and administrative expense ratio = O&Ad Exp / Net sales x 100.
c) Selling & distribution expense Ratio =S&D Exp / Net sales x 100.
d) Finance expense Ratio = FE /Net sales x 100.

4) Net Profit Ratio -

It is the ratio of net profit earned by business and its net sales.It measures overall profitability.

N / P Ratio = Net profit / Net sales x 100.

Net profit is calculated in the following manner.

Operating net profit.

Add non-operating incomes

Less non-operating expenses.

Standard N/P Ratio - 5 to 10 %

Significance - It indicates efficiency as well as profitability of a business.

Interpretation - Higher the ratio,better is the profitability.This means higher returns to shareholders.

Profitability Ratios based on investment.

a) Return On Investment (ROI) (Accounting rate of return)
It measures overall profitability . It establishes the relationships between profit and investments.

ROI = Profit before interest & tax / Capital employed x 100.

Capital employed = Fixed asset + current liabilities

Or

Share capital +reserves +debentures +other long term loans.

PBIT = Gross profit - Operating expenses.

Standard - 15%

Significance - It is used as a basis for various managerial decisions like capital budgeting.

Interpretation - The higher the ratio greater is the overall profitability.

b) Return on shareholders fund
ROSF = Net profit after interest and tax / shareholders fund x 100

c) Return on equity capital
ROEC = Net profit after tax & preference dividend / equity shareholders fund x 100 d) Earning Per Share

EPS = Net profit available to equity shareholders / No.of equity shares. e) Dividend Per Share

DPS =Dividend paid to equity shareholders / No.of equity shares.