INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT (KMBFM01)

MBA 3rd Semester

1st Sessional Paper Solution

1. (a.) Face value = ₹ 1,25,000 **Dividend** = 15% of ₹ 1,25,000 = ₹ 18,750

Value of preference share = Present value factor of annuity for 15 years x Dividend + Present value factor for 15 years x Face value of share

Discount factor at 25% for present value annuity for 15 years = 3.8593

Discount factor at 25% for present value for 15 years = 0.0352

Value of preference share = 3.8593 x 18,750 + 0.0352 x 1,25,000

= 72,361.875 + 4,400

= ₹ 76,761.875

= ₹ 76,761.88.

(b.) An underwriter is one who can take the guarantee to those issued shares which are not purchased by the public.

(c.) Private placement is the sale of securities to a relatively small number of select investors for raising capital. Investors involved in private placements are usually large banks, mutual funds, insurance companies and pension funds. When a company raises funds by issuing its shares, debentures and bonds to the public, it is called as a public issue.
Private placement is the opposite of a public issue as in private placement the securities are issued to the selected investors while in public issue the securities are issued to the public in the open market.

(d.) These shares are issued to exceptional employees or directors of the company for their exceptional job in terms of providing know-how or intellectual property rights to the company.

(e.) It is a kind of bond issued by a company as it can issue against stock. A short-term corporate bond has a maturity of less than 5 years, intermediate is 5 to 12 years and long term is more than 12 years.It is characterized by higher yields because there is a higher risk of a company defaulting than a government.It is issued because in this bond the return is based on equity and there must be a possibility of high return in comparison of other bonds.

2 (a.) When a company is doing well and wants to reward its shareholders for their investment, it issues a dividend. Dividends also offer a good way for companies to communicate their financial stability and profitability to the corporate sphere in general. Stocks that issue dividends tend to be fairly popular among investors, so many companies pride themselves on issuing consistent and increasing dividends year after year. In addition to rewarding existing shareholders, the issuing of dividends encourages new investors to purchase stock in a company that is thriving. Dividends are generally paid in cash or additional shares of stock, or a combination of both. When a dividend is paid in cash, the company pays each shareholder a specific rupee amount according to the number of shares they already own. A company that declares a ₹1 dividend, therefore, pays ₹1,000 to a shareholder who owns 1,000 shares.
In a stock dividend, shareholders are issued additional shares according to their current ownership stake. If the company in the above example issues a 10% stock dividend instead, the shareholder receives an

additional 100 shares. Some companies offer shareholders the option of reinvesting a cash dividend by purchasing additional shares of stock at a reduced price.

Stockholder equity represents the capital portion of a company's balance sheet. The stockholders' equity can be calculated from the balance sheet by subtracting a company's liabilities from its total assets. Although stock splits and stock dividends affect the way shares are allocated and the company share price, stock dividends do not affect stockholder equity.

Stockholder equity also represents the value of a company that could be distributed to shareholders in the event of bankruptcy. If the business closes shop, liquidates all its assets and pays off all its debts, stockholder equity is what remains. It can most easily be thought of as a company's total assets minus its total liabilities.

One of the chief components of stockholder equity is the amount of money a company raises through the sale of shares of stock, called equity capital. However, even private companies, which are not publicly traded, have stockholder equity.

Though uncommon, it is possible for a company to have a negative stockholder equity value if its liabilities outweigh its assets. Because stockholder equity reflects the difference between assets and liabilities, analysts and investors scrutinize companies' balance sheets to assess their financial health.

One of the most important financial statements companies issue each year is the balance sheet. The balance sheet outlines all a company's assets and liabilities. Basically, the balance sheet is a rundown of all the things a company owns, including cash, property, investments and inventory, as well as everything it owes to other parties, such as loans, accounts payable and income tax due. It offers a snapshot of a company's financial situation at a specific moment in time.

Stockholders' equity includes retained earnings, paid-in capital, treasury stock and other accumulative income. If assets and liabilities figures are not readily available, the stockholder equity can be calculated by adding preferred stock to common stock and adding additional paid-in capital, adding or subtracting retained earnings, and subtracting treasury stock. Stockholder equity is usually referred to as a company's book value.

The retained earnings section of the balance sheet reflects the total amount of profit a company has retained over time. After the business accounts for all its costs and expenses, the amount of revenue that remains at the end of the fiscal year is its net profit. The company can choose to do one of three things with its profit: pay dividends to shareholders, reinvest the funds into the company, or leave it on account. The portion of profits left on account is rolled over each year and listed on the balance sheet as retained earnings.

The effect of dividends on stockholders' equity is dictated by the type of dividend issued. When a company issues a dividend to its shareholders, the value of that dividend is deducted from its retained earnings. Even if the dividend is issued as additional shares of stock, the value of that stock is deducted. However, a cash dividend results in a straight reduction of retained earnings, while a stock dividend results in a transfer of funds from retained earnings to paid-in capital. While a cash dividend reduces stockholders' equity, a stock dividend simply rearranges the allocation of equity funds.

(b.) A speculator is a person or an entity that trades securities essentially as bets that the price will go up or down, and as such, typically has an above-average risk tolerance. He/She utilizes strategies and typically a shorter time frame in an attempt to outperform traditional longer-term investors. Speculators take on risk, especially with respect to anticipating future price movements, in the hope of making gains that are large enough to offset the risk.

Types of Speculators:

1. **Jobber:** He/She is a professional speculator who has a complete information regarding the particular shares he/she deals. He/She transacts the shares of profit. He/She conducts the securities in his/her own name. He/She is the member of the stock exchange. He/She is equivalent to market maker.
2. **Broker:** He/She is a person who transact business in securities on behalf of his clients and receives commission for his services. He/She deals between the jobbers and members outside the house. He/She is an experienced agent of the public.
3. **Bull:** He/She is a speculator who purchases various types of shares. He/She purchases to sell them on higher prices in future. He/She may sell the shares and securities before coming in possession. If the price falls then he suffers a loss.
4. **Bear:** He/She is always in a position to dispose of securities which he does not possess. He/She makes profit on each transaction. He/She sells the various securities for the objective of taking advantages of an expected fall in prices.
5. **Stag:** He/She is also a speculator. He/She purchases the shares of newly floated company and shown himself a genuine investor. He/She is not willing to become an actual shareholder of the company. He/She purchases the shares to sell them above the par value to earn premium.

(c.) A stock exchange is an exchange where stockbrokers and traders can buy and/or sell stocks (also called shares), bonds and other securities. It is a market place where listed securities buy and sell for investment or speculation. It is an organised and regulated market for various securities issued by corporate sector and other institutions. It is a privately organised market which are used to facilitate trading of securities. It is as ready market where buyers and sellers are always available to buy and sell the securities. The securities of corporations, trusts, Government, municipal corporations, etc. are allowed to deal at stock exchange. It is a market wholly governed and regulated by SEBI.

Functions of Stock Exchange:

1. **Ensure Liquidity of Capital:** It provides a place where securities are converted into cash. It is a market where buyers and sellers are always available and those who need hard cash can sell their securities.
2. **Economic Barometer:** It is a reliable barometer to measure the economic condition of a country. Every major change in country is reflected in the prices of shares. The rise or fall in the share prices indicates the boom or recession cycle of the country.
3. **Pricing of Securities:** It helps to value the securities on the basis of demand and supply. The securities of profitable and growth oriented companies are valued higher as there is more demand for such securities. The valuation of securities is useful for investors, government and creditors. The investors can know the value of their investment, the creditors can value the creditworthiness and government can impose taxes on value of securities.
4. **Contributes to Economic Growth:** In stock exchange securities of various companies are bought and sold. This process of investment and re-investment helps to invest in most productive investment proposal and this leads to capital formation and economic growth.
5. **Spreading of Ownership Culture:** Stock exchange encourages people to invest in ownership securities by regulating new issues, better trading practices and by educating public about investment.

6. **<u>Providing Scope for Speculation:</u>** To ensure liquidity and demand of supply of securities the stock exchange permits healthy speculation of securities.
7. **<u>Better Allocation of Capital:</u>** The shares of profit making companies are quoted at higher prices and are actively traded so such companies can easily raise fresh capital from stock market. The general public hesitates to invest in securities of loss making companies. So stock exchange facilitates allocation of investor's fund to profitable channels.
8. **<u>Promotes the Habits of Savings and Investment:</u>** The stock market offers attractive opportunities of investment in various securities. These attractive opportunities encourage people to save more and invest in securities of corporate sector rather than investing in unproductive assets such as gold, silver, etc.
9. **<u>Safety of Transactions:</u>** In stock market only the listed securities are traded and stock exchange authorities include the companies names in the trade list only after verifying the soundness of company. The companies which are listed they also have to operate within the strict rules and regulations. This ensures safety of dealing through stock exchange.

(d.) A mutual fund might be a better investment than individual stocks and bonds because the risk is diversified with a mutual fund. ... It could be an investment in stock, money market, or bonds. The advantages of a mutual fund over individual stocks are that diversification. The money is allocated in different securities.

A mutual fund is a type of financial vehicle made up of a pool of money collected from many investors to invest in securities such as stocks, bonds, money market instruments, and other assets. Mutual funds are operated by professional money managers, who allocate the fund's assets and attempt to produce capital gains or income for the fund's investors. A mutual fund's portfolio is structured and maintained to match the investment objectives stated in its prospectus.

Mutual funds give small or individual investors access to professionally managed portfolios of equities, bonds and other securities. Each shareholder, therefore, participates proportionally in the gains or losses of the fund. Mutual funds invest in a vast number of securities, and performance is usually tracked as the change in the total market cap of the fund—derived by the aggregating performance of the underlying investments.

Mutual funds pool money from the investing public and use that money to buy other securities, usually stocks and bonds. The value of the mutual fund company depends on the performance of the securities it decides to buy. So, when you buy a unit or share of a mutual fund, you are buying the performance of its portfolio or more precisely, a part of the portfolio's value. Investing in a share of a mutual fund is different from investing in shares of stock. Unlike stock, mutual fund shares do not give its holders any voting rights. A share of a mutual fund represents investments in many different stocks (or other securities) instead of just one holding.

That's why the price of a mutual fund share is referred to as the net asset value (NAV) per share, sometimes expressed as NAVPS. A fund's NAV is derived by dividing the total value of the securities in the portfolio by the total amount of shares outstanding. Outstanding shares are those held by all shareholders, institutional investors, and company officers or insiders. Mutual fund shares can typically be purchased or redeemed as needed at the fund's current NAV, which—unlike a stock price—doesn't fluctuate during market hours, but is settled at the end of each trading day.

The average mutual fund holds hundreds of different securities, which means mutual fund shareholders gain important diversification at a low price. Consider an investor who buys only Google stock before the company has a bad quarter. He stands to lose a great deal of value because all of his dollars are tied to one company. On the other hand, a different investor may buy shares of a mutual fund that happens to

own some Google stock. When Google has a bad quarter, she only loses a fraction as much because Google is just a small part of the fund's portfolio.

A mutual fund is both an investment and an actual company. This dual nature may seem strange, but it is no different from how a share of AAPL is a representation of Apple, Inc. When an investor buys Apple stock, he is buying part ownership of the company and its assets. Similarly, a mutual fund investor is buying part ownership of the mutual fund company and its assets. The difference is that Apple is in the business of making smartphones and tablets, while a mutual fund company is in the business of making investments.

Investors typically earn a return from a mutual fund in three ways:

Income is earned from dividends on stocks and interest on bonds held in the fund's portfolio. A fund pays out nearly all of the income it receives over the year to fund owners in the form of a distribution. Funds often give investors a choice either to receive a check for distributions or to reinvest the earnings and get more shares

If the fund sells securities that have increased in price, the fund has a capital gain. Most funds also pass on these gains to investors in a distribution.

If fund holdings increase in price but are not sold by the fund manager, the fund's shares increase in price. You can then sell your mutual fund shares for a profit in the market.

If a mutual fund is construed as a virtual company, its CEO is the fund manager, sometimes called its investment adviser. The fund manager is hired by a board of directors and is legally obligated to work in the best interest of mutual fund shareholders. Most fund managers are also owners of the fund. There are very few other employees in a mutual fund company. The investment adviser or fund manager may employ some analysts to help pick investments or perform market research. A fund accountant is kept on staff to calculate the fund's NAV, the daily value of the portfolio that determines if share prices go up or down. Mutual funds need to have a compliance officer or two, and probably an attorney, to keep up with government regulations.

Most mutual funds are part of a much larger investment company; the biggest have hundreds of separate mutual funds. Some of these fund companies are names familiar to the general public.

Equity Funds

The largest category is that of equity or stock funds. As the name implies, this sort of fund invests principally in stocks. Within this group is various sub-categories. Some equity funds are named for the size of the companies they invest in small-, mid- or large-cap. Others are named by their investment approach: aggressive growth, income-oriented, value, and others. Equity funds are also categorized by whether they invest in domestic stocks or foreign equities. There are so many different types of equity funds because there are many different types of equities. A great way to understand the universe of equity funds is to use a style box, an example of which is below.

The idea here is to classify funds based on both the size of the companies invested in (their market caps) and the growth prospects of the invested stocks. The term value fund refers to a style of investing that looks for high quality, low growth companies that are out of favor with the market. These companies are characterized by low price-to-earnings (P/E), low price-to-book (P/B) ratios, and high dividend yields. On the other side of the style, spectrum are growth funds, which look to companies that have had (and are expected to have) strong growth in earnings, sales, and cash flows. These companies typically have high P/E ratios and do not pay dividends. A compromise between strict value and growth investment is a "blend," which simply refers to companies that are neither value nor growth stocks and are classified as being somewhere in the middle.

3 (a.) Demat account functions like a bank account, where your bank balance is a mere entry in the bank passbook and you do not hold the cash physically. Securities too are held in an electronic form (demateralised form), in a similar manner and debited or credited.

A Demat Account is an account that allows investors to hold their shares in an electronic form. Stocks in Demat account remain in dematerialized form. Dematerialization is the process of converting physical shares into electronic format.

Demat account digit is quoted for all transactions to enable electronic settlements of trades to take place. Every shareholder will have a Dematerialized account for the purpose of transacting.

Access to the Dematerialized account requires an internet password and a transaction password. Transfers or purchases of securities can then be initiated. Purchases and sales of securities on the Dematerialized account are automatically made once transactions are confirmed and completed.

The four simple steps to open a demat account and start trading.

i. **Choosing a Depository Participants (DP):** A depository (in simple terms) is an institution holding a pool of pre-verified shares held in electronic mode that offers efficient settlement of transactions. A Depository Participant (DP) is an intermediary between the investor and the depository. A DP is typically a financial organization like a bank, broker, financial institution, or custodian acting as an agent of the depository to make its services available to the investors. Each DP is assigned a unique identification number known as DP-ID. As of March 2006, there were a total of 538 DPs registered with SEBI.

ii. **Documentation:** To open a Demat account you have to provide documents which fulfill the requirements of KYC (Know Your Customer) norms. You have to sign a contract with Stock broker. Generally the documents are:

- PAN (compulsory)
- Bank statement (last 3 months)
- Address proof
- Income Tax Return
- Two colour photos
- Bank crossed cheque (If required)
- KYC details
- Aadhar Card

iii. Contract

iv. Account opening and Demat account number

(b.) A bond called as a debt instrument issued normally for a period of more than one year with the purpose of raising capital by borrowing. It is a written and signed promise to pay a certain sum of money on a certain date i.e. on maturity, or on fulfillment of a specified condition. All documented contracts and loan agreements are bonds. It normally issued on discounted value i.e. less than par value but sometimes it can be issued against some fixed interest. It can be also called bills, notes, debt securities, or debt obligations.

Bills - debt securities maturing in less than one year.
Notes - debt securities maturing in one to 10 years.
Bonds - debt securities maturing in more than 10 years.

Bonds have set maturity dates that can range from one to 30 years. Short-term bonds (mature in three years or less), intermediate bonds (mature in three to ten years) and long-term bonds (mature in ten years or more).

If the bond has a "call feature", the issuer i.e. the company is allowed to redeem the bond before its maturity date.

4(a.) Dematerialization – It is a process where securities held by the investor in physical form are cancelled and the investor gives an electronic entry or number so that she/he can hold it as an electronic balance in an account

Problems with dealing in physical form:- (any two)

1. Theft
2. Fake/forged transfers
3. Transfer delays
4. Paper work associated with share certificates or debentures held in physical form.

(b.) Preference Shares are the shares which promise the holder a fixed dividend, whose payment takes priority over that of ordinary share dividends. Capital raised by the issue of preference shares is called preference share capital.
The preference shareholders are in superior position over equity shareholders in two ways: first, receiving a fixed rate of dividend, out of the profits of the company, before any dividend is declared for equity shareholder and second, receiving their capital after the claims of the company's creditors have been settled, at the time of liquidation. In short, the preference shareholders have a preferential claim over dividend and repayment of capital as compared to equity shareholders.
Dividends are payable only at the discretion of the directors and only out of profit after tax, to that extent, these resemble equity shares. Preference resemble debentures as both bear fixed rate of return to the holder. Thus, preference shares have some characteristics of both equity shares and debentures. It generally do not enjoy any voting rights.
If a company issue participating preference shares then shareholders have a right to participate in the surplus profit of the company after being paid to the equity shareholders.

5(a.)

Book Value Calculation	**Amount (₹)**
Total Assets	85,00,000
Less: Long-term debt	18,00,000
	67,00,000
Less: Short-term debt (Bank Overdraft)	2,30,000
	64,70,000
Less: Bills Payable	1,70,000
Book Value	63,00,000

Replacement Cost Adjusted balance sheet will now have fixed assets value as follows:

Fixed Assets	**Amount (₹)**
Machinery	15,00,000
Furniture	13,00,000
Land & Building	20,00,000
Original Cost	48,00,000
Less: Unused Assets (40%)	19,20,000
Balance Fixed Assets	28,80,000
After revaluation at 170%	48,96,000

So, the fixed assets have been increased by (₹ 48,96,000 – 48,00,000) = ₹ 96,000

Replacement Cost Adjusted Balance Sheet

Liabilities	**Amount (₹)**	**Assets**	**Amount (₹)**

Equity Share Capital	20,00,000	Fixed Assets	48,96,000
Preference Share Capital	16,00,000	Debtors	11,00,000
Reserve & Surplus	14,00,000	Stock	13,00,000
Debentures	13,00,000	Cash at bank	11,50,000
Long-term loan	18,00,000	Cash in hand	1,50,000
Bank Overdraft	2,30,000		
Bills Payable	1,70,000		
Total	85,96,000	**Total**	85,96,000

Replacement Cost Value Calculation:

Replacement Cost Value Calculation	Amount (₹)
Total Assets (now higher)	85,96,000
Less: Long-term debt	18,00,000
	67,96,000
Less: Short-term debt (Bank Overdraft)	2,30,000
	65,66,000
Less: Bills Payable	1,70,000
Replacement Cost Value or Net Substantial Value	63,96,000

Hence, as per replacement cost method, the value of the company is ₹ 63,96,000.

(b.) It is a medium to long-term debt instrument used by large companies to borrow money, at a fixed rate of interest. If a company needs funds for extension and development purpose without increasing its share capital, it can borrow from the general public by issuing certificates for a fixed period of time and at a fixed rate of interest. Such a loan certificate is called a debenture. Debentures are generally freely transferable by the debenture holder. Debenture holders have no rights to vote in the company's general meetings of shareholders. Debenture holders are the creditors of the company. Debenture holders normally receive fixed rate of return, either business have earned profit or loss. Interest on debenture is a tax deductible expenditure and thus it saves income tax. Cost of debenture is relatively lower than preference shares and equity shares. Issue of debentures is advantageous during times of inflation.

Types of Debentures:

1. **Ordinary Debentures:** Such debentures are issued without mortgaging any asset, i.e. this is unsecured. It is very difficult to raise funds through ordinary debenture.

2. **Mortgage Debentures:** This type of debenture is issued by mortgaging an asset and debenture holders can recover their dues by selling that particular asset in case the company fails to repay the claim of debenture holders.

3. **Non-convertible Debentures:** A non-convertible debenture is a debenture where there is no option for its conversion into equity shares. Thus the debenture holders remain debenture holders till maturity.

4. **Partly Convertible Debentures:** The holders of partly convertible debentures are given an option to convert part of their debentures into equity shares. After conversion they will enjoy the benefit of both debenture holders as well as equity shareholders.

5. **Fully Convertible Debentures:** Fully convertible debentures are those debentures which are fully converted into specified number of equity shares after predetermined period at the option of the debenture holders.

6. **Redeemable Debentures:** Redeemable debenture is a debenture which is redeemed/repaid on a pre-determined date and at pre-determined price.

7. **Irredeemable Debenture:** Such debentures are generally not redeemed during the lifetime of the company. So, it is also termed as perpetual debt. Repayment of such debenture takes place at the time of liquidation of the company.

8. **Registered Debentures:** Registered debentures are those debentures where names, address, serial number, etc., of the debenture holders are recorded in the register book of the company. Such debentures cannot be easily transferred to another person.

9. **Unregistered Debentures:** Unregistered debentures may be referred to those debentures which are not recorded in the company's register book. Such type of debenture is also known as bearer debenture. This kind of debentures can be easily transferred to any other person.

A company need to issue the debentures in the market to raise funds due to following reasons:

1. Provides corporations with a way to raise capital without diluting the current shareholders' equity.
2. With debentures, corporations can often borrow at a lower interest rate than the rate available in banks. By issuing debentures directly to the investors, corporations can eliminate the banks as "middlemen" in the transactions. Without the intermediaries, the borrowing process becomes more efficient and less expensive.
3. By issuing debentures, corporations can often borrow money for a fixed rate for a longer term than it could at a bank. Most banks will not make fixed rate loans for longer than five years because they fear losing money if their cost of funds (raised by selling CDs, savings accounts, and the like) rises to a higher rate than long-term loans. Most companies want to borrow money for long terms and so elect to issue debentures.
4. The bond market offers a very efficient way to borrow capital. By issuing bonds, the borrower is spared the task of undergoing numerous separate negotiations and transactions in order to raise the capital it needs.