

## Answers key for IAS 2 – IM

### Part A:

- 1) A) Present value concept is the fundamental concept used in the share valuation procedure. Money has ‘ Time Value ‘. This implies that a rupee received now is worth more than the rupee to be received after one year, the rupee received now can be deposited in a bank at 10% interest rate to receive Rs.1.10 after one year.

$$F=P(1+r)^n$$

- 2) Basic principles of technical analysis:

- Market value of a security is related to demand and supply factors operating in the market.
- There are both rational and irrational factors which surround the supply and demand factors.
- Security prices behave in a manner that their movement is continuous in a particular direction for some length of time.
- Trends in stocks prices have been seen to change when there is shift in the demand and supply factors.
- The shift in demand and supply can be detected through charts prepared specially to show market action.
- Patterns which are projected by charts record price movement and these recorded patterns.

3. Bond value =  $C * PVIF_{r,n} + MPVIF_{r,n}$   
= 89.90 value.

Part B:

2. a.

Passive portfolio strategies: Buy and hold, Indexing. Buy and hold strategy simply involves buying a bond and holding it until maturity. Bond investors would examine such factors as quality ratings, coupon levels, terms to maturity, call features and sinking funds. Indexing involves attempting to build a portfolio that will match the performance of a selected bond portfolio index

- Semi-Active Management Strategy: It refers to bond portfolio management techniques that are used to service a prescribed set of liabilities. It can be Pure Cash Matched Dedicated Portfolios (conservative approach) or Dedication With Reinvestment or can be both.
- Active management strategies: Potential sources of return from fixed income portfolio: Coupon income, Capital gain, Reinvestment income. Fundamental active strategies includes, Interest rate expectations strategy, Yield Curve strategies, Valuation analysis, Credit analysis, use of Bond swaps
- Matched-funding techniques: Horizon matching. It is a combination of cashmatching dedication and immunization. Important decision is the length of the horizon period

2. b.

$$\text{Assume } 13\% = C \cdot PVIFA_{r,n} + M \cdot PVIF_{r,n}$$

$$= \text{Rs } 112/$$

$$\text{Assume } 12\% = C \cdot PVIFA_{r,n} + M \cdot PVIF_{r,n}$$

$$= \text{Rs } 118/$$

With interrelation

$$\text{ROR} = 12.59\%$$

$$\text{CY} = C \cdot PVIFA_{r,n} + M \cdot PVIF_{r,n}$$

$$= \text{Rs } 114.7/$$

2. C.

P/E ratio= PAT- Preference share /total no of shares.

$$= 58,00,000$$

Preference share= Dividend \* FV\*No of shares

$$= 19,00,000$$

$$\text{EPS} = 12.32$$

$$\text{P/E ratio} = 9.25$$

Part c

3. a. Coupon Rate= Bond value \* CR

Rs 140/.

$$\text{Assume } 13\% = C * \text{PVIF}_{n,r} + M * \text{PVIn},r$$

$$= 1035.38$$

$$\text{Assume } 12\% = C * \text{PVIF}_{n,r} + M * \text{PVIn},r$$

$$= 1071.7$$

$$\text{ROR} = 12.6\%$$

$$\text{YTM} = \text{PV}(1+Y \text{ realised})^2 = Fv$$

$$= 1439.64/$$

3. b.

Price	Po	Return	Avg return	Risk
115	0.1	-5	-0.5	3.025
120	0.1	0	0	0
125	0.2	5	1	3.2
130	0.3	10	3	14.7
135	0.2	15	3	28.8
140	0.1	20	2	32.4

$$\text{Expected return} = 8.5$$

$$\text{Risk} = 82.125$$

$$\text{SD} = 9.0622$$

Variance= 3.01

3.c

### **Fundamental and Technical Analysis**

There are three broad theories concerning stock price movements. These are the fundamental analysis, technical analysis and efficient market hypothesis. Fundamental analysts believe that by analyzing key economic and financial variables they can estimate the intrinsic worth of a security and then determine what investment action to take. Fundamental analysis seeks to identify under priced securities and overpriced securities. Their investment strategy consists in buying under priced securities and selling overpriced securities, thereby earning superior returns.

A technical analyst maintains that fundamental analysis is unnecessary. He believes that history repeats itself. Hence, he tries to predict future movements in share prices by studying the historical patterns in share price movements.

The efficient market hypothesis is expressed in three forms. The weak form of the EMH directly contradicts technical analysis by maintaining that past prices and past price changes cannot be used to forecast future price changes because successive price changes are independent of each other. The semi-strong form of the EMH contradicts fundamental analysis to some extent by claiming that the market is efficient in the dissemination and processing of information and hence, publicly available information cannot be used consistently to earn superior investment returns.

The strong form of the EMH maintains that not only is publicly available information useless to the investor or analyst but all information is useless.

Even though the EMH repudiates both fundamental analysis and technical analysis, the market is efficient precisely because of the organized and systematic efforts of thousands of analysts undertaking fundamental and technical analysis. Thus, the paradox of efficient market hypothesis is that both fundamental and technical analyses are required to make the market efficient and thereby validate the hypothesis.

Part D

4. Share Value =  $D/(1+R)^5$