Paper-12: FINANCIAL MANAGEMENT & INTERNATIONAL FINANCE

Time Allowed: 3 Hours   **Full Marks: 100**

The figures in the margin on the right side indicate full marks.
Answer Question No. 1 from Part A which is compulsory and any five questions from Part B.
Working notes should form a part of the answer
"Wherever necessary, suitable assumptions should be made and indicated in answers by the candidates"

PART A (25 Marks)

Question.1

(a) In each, of the cases given below, one out of four answers is correct. Indicate the correct answer(=1mark)and give workings/reasons briefly in support of your answer (=1mark)

[2x9=18]

(i) Optimistic Ltd has an EPS of ₹90 per share. Its Dividend Payout Ratio is 40%. Its earnings and dividends are expected to grow at 5% per annum. Find out the cost of Equity Capital if its Market Price is ₹360 per share.
  A. 5%
  B. 10.5%
  C. 15%
  D. 15.5%

(ii) X owns a stock portfolio equally invested in a risk free asset and two stocks. If one of the stocks has a beta of 0.8 and the portfolio is as risky as the market what must be the beta of the other stocks in the portfolio?
  A. 2.1
  B. 2.2
  C. 2.4
  D. 2.6

(iii) An American company's Japanese subsidiary, Tahoma Japan, has exposed assets of ¥8 billion and exposed liabilities of ¥6 billion. During the year, the yen appreciates from ¥125/$ to ¥95/$.What is Tahoma Japan's net translation exposure at the beginning of the year in dollars?
  A. $16 million
  B. $18 million
  C. $14 million
  D. $12 million

(iv) The NAV of each unit of a closed-end fund at the beginning of the year was ₹18.By the end of the year its NAV equals ₹18.50. At the beginning of the year each unit was selling at a 2% premium to NAV and by the end of the year each unit is selling at a 4% discount to NAV. If the closed-end fund paid year end distribution of income of ₹2.50 on each unit, the rate of return to the investor in the fund during the year would be
  A. 10.35%
  B. 11.51%
  C. 11.95%
  D. None of the above

(v) The share price of Kaustav Ltd. (F.V. ₹10) quotes ₹500 in the NSE and the 3 months future price quotes at ₹525. The borrowing rate is 12% p.a.if the expected annual dividend yield is 15% payable before expiry, then the price of 3 months Kaustav Ltd's future would be

A. ₹500.00
B. ₹513.50
C. ₹516.50
D. Insufficient information

(vi) T Ltd. requires ₹3 million in cash for meeting its transaction needs over the next 6 months, its planning horizon for liquidity decision. The company currently has the amount in the form of marketable securities. The cash payment will be made evenly over the six month period. T Ltd. earns 12% annual yield on its marketable securities. Conversion and marketable securities into cash entails a fixed cost of ₹1000 per transaction. What will be the optimal conversion size as per Baumol model of cash management?
A. ₹3,15,628
B. ₹3,16,228
C. ₹3,17,678
D. ₹3,18,428

(vii) The total asset – turnover ratio and total asset to net- worth ratio of a company are 2.20 and 2.60 respectively. If the net profit margin of the company is 6%, what would be the return on equity?
A. 32.32%
B. 34.32%
C. 35.60%
D. 36.60%

(viii) The price of Swedish krones is $0.14 today. If it appreciates by 10% today, how many krones a dollar will buy tomorrow?
A. 6.49351
B. 4.69351
C. 3.49513
D. 5.64913

(ix) Samudra Steel earns 12% on the equity. The growth rate of the dividends and earnings is 6%. The book value per share is ₹60. If the cost of equity is 14% which of the following is the market price of the share of company, accounting to the Marakon Model of Valuation?
A. ₹36
B. ₹39
C. ₹45
D. ₹48

(b) State if each of the following sentences is true or false: [1 × 7]

(i) The amount of cheques issued by a company not yet paid out is referred to as net float.
(ii) Global Depository Receipts are issued to investors in India, who want to subscribe to shares of foreign companies.
(iii) IRR and NPV always give the same profitability ranking.
(iv) Retention Ratio is the product between growth rate and rate of return on investments.
(v) If Profitability Index is 1, cash inflow and cash outflow would be equal.
(vi) A currency swap converts a stream of cash flow from one currency to another without exchange rate risk.
(vii) A call option is 'in-the-money' when the price of the underlying asset is below the exercise price of the call.

Answer: 1

(a)   (i)   C

$$K_e = \frac{\text{Dividend per share}}{\text{Market price per share}} + g\,(\text{growth rate})$$

$$= \frac{₹90 \times 40\%}{₹360} + 5\%$$

= 10% +5% =15%.

(ii)   B
Beta of market = $\beta_m = \beta_p = 1$
β_p = 1/3(0.8) +1/3(x) + 1/3(0) =1
Solving, we get beta of other stock = 2.2.

(iii)   A
Tahoma Japan has net translation exposure of ¥2 (¥8 - ¥6). Converted into dollars, this figure yields translation exposure of $16 million (2 billion/125).

(iv)   A
The price of unit at the beginning of the year
₹18 × 1.02 =₹18.36.
The price of unit at the end of the year
₹18.50 × (1-.04)= ₹17.76
The price of the fund fell by (₹17.76 -₹18.36) = -0.60
Rate of return = (2.50 – 0.60)/18.36 =10.35%

(v)   B
Future Price = Spot Price + Cost of Carry - Dividend
=500 +[500 × (0.12 × 3)/12]-10 × 0.15
= 500 +15 – 1.50 = ₹513.50

(vi)   B
As per Baumol model of cash management,

The optimum conversion size = $\sqrt{\dfrac{2FT}{I}}$, where

F = fixed cost of transaction = ₹1000
T = total cash required = ₹30,00,000
I = interest rate for the required period = 12% × 6/12=6%

Optimal Conversion size = $\sqrt{\dfrac{2 \times 1000 \times 3000000}{6\%}}$ = ₹316228

(vii)   B

$$\text{Return on Equity (ROE)} = \frac{\text{Profit after Tax}}{\text{Sales}} \times \left(\frac{\text{Sales}}{\text{Total Assets}} \times \frac{\text{Total Assets}}{\text{Net Worth}} \right)$$

= 0.06 × 2.20 ×2.60
= 0.3432
= 34.32%

(viii)   A
Swedish Krones = $0.140
Add: Appreciation by 10% = [$0.140 × 10%] = $0.014

Total = ($0.140 +$0.014)= $0.154
Krones a dollar will buy tomorrow = 1/0.154 =6.49351

(ix)　　C
As per Marakon Model of valuation,

Formulae for computation of Market price $= \dfrac{B(r-g)}{k-g}$

Where,　r = return on equity = 12%
　　　　g= growth rate of dividend=6%
　　　　k = cost of equity = 14%
　　　　Book Value = ₹60

Market Value $= \dfrac{60(12-6)}{14-6} = ₹45$

(b) (i) False. Net float is the total amount of float in a bank account. It is calculated by subtracting the disbursement float money spent but not yet taken out of the account from the collection float money deposited but not yet cleared.

(ii) False. Global Depository Receipts financial instruments used by private markets to raise capital denominated in either U.S. dollars or euros.

(iii) False. Using of IRR and NPV methods will not result in same profitability rankings. When evaluating mutually exclusive projects, the one with the highest IRR may not be the one with best NPV.

(iv) False. Under Gordon's model, the growth rate is determined by the product of retention ratio and rate of return on investment.

(v) True. If Profitability Index is 1, cash inflow and cash outflow would be equal. As PI= PV of cash inflow/PV of cash Outflow. If PI is 1, then cash inflow and cash outflow would be equal.

(vi) True. A currency swap converts a stream of cash flow from one currency to another without exchange rate risk.

(vii) False. Call option is in –the-money when the price of the underlying asset is above the striking price of the call.

PART B (75 MARKS)

Question. 2

(a) The annual turnover of S Ltd. is ₹60 lakhs of which 80% is on credit. Debtors are allowed one month to clear off the dues. A factor is willing to advance 90% of the bills raised on credit for a fee of 2% a month plus a commission of 4% on the total amount of debts.S Ltd. as a result of this arrangement is likely to save ₹21600 annually in management costs and avoid bad debts at 1% on the credit sales.
A scheduled bank has come forward to make an advance equal to 90% of the debts at an interest rate of 18% p.a. However its processing fee will be at 2% on the debts. Would you accept factoring offer or the offer from the bank?　[10]

(b) Discuss Stochastic Model of Cash Management.　[5]

Answer:

(a) We calculate in two ways, one using annual turnover and other using monthly turnover.

Note: Fee is charged on amount financed by factor, commission is charged on entire debts managed.

Cost of Factoring	Using Monthly figures	Using Annual figures
Fee of 2% on amount financed [Credit Sales = 80% of turnover i.e. ₹48lakhs]	=0.02 x 0.9 x ₹4,00,000 = ₹7200	=0.02 x 0.9 x ₹48,00,000 = ₹86,400
Commission at 4%	= 0.04 x ₹4,00,000 = ₹16,000	= 0.04 x ₹48,00,000 = ₹1,92,000
Less: Savings in costs		
Savings in management cost	= ₹21,600/12= ₹1,800	= ₹21,600
1% saving of bad debts	= 0.01 x ₹4,00,000 = ₹4,000	=0.01 x ₹48,00,000 = ₹48,000
Net cost in factoring	₹17,400	₹2,08,800

Cost of Bank Advance:	Using Monthly figures	Using Annual figures
Interest at 18% p.a.	=(0.18 x 0.9x₹4,00,000)/12 = ₹5,400	=0.18 x 0.09 x ₹48,00,000 = ₹64,800
Processing Fee 2%	=0.02 x ₹4,00,000 = ₹8,000	=0.02 x ₹48,00,000 = ₹96,000
Add: Bad debts loss that cannot be avoided	=0.01 x ₹4,00,000 = ₹4,000	=0.01 x ₹48,00,000 = ₹48,000
Net cost in Bank Advance	₹17,400	₹2,08,800

Since costs of both alternatives are equal, it is immaterial whether S Ltd. goes in for factoring or bank loan.

(b) This model is developed to avoid the problems associated with EOQ mode. Model developed by Miller and Orr. The basic assumption of this model is that cash balances are irregular. The model prescribed two control limits.

Upper Control Limits (UCL) – When cash balance reaches the upper limits, a transfer of cash to investment account should be made.

Lower Control Limits (LCL)- When cash balance reaches the lower point, a portion of securities from investment account should be liquidated to return the cash balances to its return point.

The Miller and Orr model is the simplest model to determine the optimal behavior in irregular cash flow situation. The model is a control limit model to determine the time and size of transfers between an investment account and cash account. The optimal point (O) of cash balance is determined by

$$O = \sqrt[3]{\frac{3TV}{4I}}$$

Where O-target (Optimal) cash balance; T-Fixed cost associated with security transactions; I-Interest per day on marketable securities; V-Variance of daily net cash flows.

Question. 3

A company has an old machine having book value zero – which can be sold for ₹50,000.The company is thinking to choose one from following two alternatives:
(i) To incur additional cost of ₹10,00,000 to upgrade the old existing machine.
(ii) To replace old machine with a new machine costing ₹20,00,000 plus installation cost ₹50,000.

Both above proposals envisage useful life to be 5 years with salvage value to be nil.
The expected after tax profits for the above alternatives are as under:

Year	Old Existing Machine ₹	Upgraded Machine ₹	New Machine ₹
1	5,00,000	5,50,000	6,00,000
2	5,40,000	5,90,000	6,40,000
3	5,80,000	6,10,000	6,90,000
4	6,20,000	6,50,000	7,40,000
5	6,60,000	7,00,000	8,00,000

The tax rate is 40%. The company follows straight line method of depreciation. Assume cost of capital to be 15%.PVF of 15% for 5 years= 0.870, 0.756, 0.658, 0.572 and 0.497. You are required to advise the company as to which alternative is to be adopted. [15]

Answer:

We have three possibilities coming out of this analysis. They are:
(i) Retain the existing machine
(ii) Upgrade the existing machine
(iii) Replace the old with a new machine

However, the problem demands that we evaluate only the second and third option. Therefore we would adopt the incremental approach of the second and the third option over the first option. In case the NPV of this incremental approach of both options turn negative, we would reject both and accept the first option, else choose a better option.

Cash Outflow
(i) In case machine is upgraded:
   Up gradation cost = ₹10,00,000.
(ii) In case new machine installed:

Cost	₹20,00,000
Add: Installation Cost	₹50,000
Total Cost	₹20,50,000
Less: Disposal of old machine	
(₹50,000 – 40% tax)	₹30,000
Total Cash Outflow	₹20,20,000

Working Note:
(i) Depreciation in case machine is upgraded ₹10,00,000/5 = ₹2,00,000
(ii) Depreciation in case new machine is installed ₹20,50,000/5 = ₹4,10,000
(iii) Old existing machine- book value is zero, hence no depreciation.

Incremental Cash Inflows after taxes (CFAT) of upgraded over Old

1	2	3	4	5	6
	Old Machine	Upgraded machine			
Year	PAT/CFAT	PAT	Depreciation	CFAT	Incremental CFAT (5-2)
1	5,00,000	5,50,000	2,00,000	7,50,000	2,50,000
2	5,40,000	5,90,000	2,00,000	7,90,000	2,50,000
3	5,80,000	6,10,000	2,00,000	8,10,000	2,30,000
4	6,20,000	6,50,000	2,00,000	8,50,000	2,30,000
5	6,60,000	7,00,000	2,00,000	9,00,000	2,40,000
Total	29,00,000				

Incremental Cash Inflows after taxes (CFAT) of New over Old

1	2	3	4	5	6
	Old Machine	New machine			
Year	PAT/CFAT	PAT	Depreciation	CFAT	Incremental CFAT (5-2)
1	5,00,000	6,00,000	4,10,000	10,10,000	5,10,000

2	5,40,000	6,40,000	4,10,000	10,50,000		5,10,000
3	5,80,000	6,90,000	4,10,000	11,00,000		5,20,000
4	6,20,000	7,40,000	4,10,000	11,50,000		5,30,000
5	6,60,000	8,00,000	4,10,000	12,10,000		5,50,000
Total	29,00,000					

Calculation of NPV of both options

	Upgraded Machine			New Machine		
Year	Incremental CFAT	PVF	Total PV	Incremental CFAT	PVF	Total PV
1	2,50,000	0.870	2,17,500	5,10,000	0.870	4,43,700
2	2,50,000	0.756	1,89,000	5,10,000	0.756	3,85,560
3	2,30,000	0.658	1,51,340	5,20,000	0.658	3,42,160
4	2,30,000	0.572	1,31,560	5,30,000	0.572	3,03,160
5	2,40,000	0.497	1,19,280	5,50,000	0.497	2,73,350
Total PV of CFAT			8,08,680			1,747,930
Less: Cash Outflows			10,00,000			20,20,000
NPV			-1,91,320			-2,72,070

As the NPV in both the new (alternative) proposals is negative, the company should continue with the existing old machine.

Question. 4

(a) Consider the following information for Target Ltd.
   EBIT   ₹1120 Lakhs
   PBT   ₹320 Lakhs
   Fixed Cost ₹700 Lakhs
   Calculate the percentage of change in earnings per share, if sales increased by 5%.   [5]
(b) A company plans to manufacture and sell 400 units of a domestic appliance per month at a price of ₹600 each. The ratio of cost to selling price are as follows:

Raw materials	30%
Packing materials	10%
Direct labour	15%
Direct expense	5%

   Fixed overheads are estimated at ₹4,32,000 per annum.
   The following norms are maintained for inventory management:

Raw materials	30 days
Packing materials	15 days
Finished goods	200 units
Work-in-progress	7 days

   Other particulars are given below:
   (a) Credit sales represent 80% of total sales and the dealer enjoy 30 working days credit. Balance 20% are cash sales.
   (b) Creditors allow 21 working days credit for payment.
   (c) Lag in payment of overheads and expenses is 15 working days.
   (d) Cash requirements to be 12% of net working capital.
   (e) Working days in a year are taken as 300 for budgeting purpose.
   Prepare a working capital requirement forecast for the budget year.   [10]

Answer:

(a) Contribution = EBIT + Fixed Cost = ₹(1120 +700) lakhs = ₹1820 Lakhs
   Operating Leverage = Contribution/EBIT = 1820/1120 = 1.625

Financial Leverage = EBIT/EBT = 1120/320 = 3.5

Combined Leverage = Operating Leverage × Financial Leverage

= 1.625 × 3.5 = 5.687

Calculation % change in EPS, if sales increased by 5%

$$\text{Combined Leverage} = \frac{\%\ \text{change in EPS}}{\%\ \text{change in sales}}$$

$$5.687 = \frac{\%\ \text{change in EPS}}{5}$$

% change in EPS = 5.687 × 5 = 28.44%

(b)

Selling Price and Cost per unit   (₹)

Raw materials	(₹600 × 30/100)	180
Packing materials	(₹600 × 10/100)	60
Direct labour	(₹600 × 15/100)	90
Direct expenses	(₹600 × 5/100)	30
Fixed overheads	[₹4,32,000/(400 ×12)]	90
Total Cost		450
Profit		150
Selling price per unit		600

Forecast of Working Capital Requirement

Current Assets:		(₹)
Raw materials stock	(4,800 ×₹180 × 30/300)	86,400
Packing material stock	(4,800 × ₹60 × 15/300)	14,400
Work-in-progress	(4,800 × ₹285 × 7/300)	31,920
Finished goods stock	(200 × ₹450)	90,000
Debtors	(4,800 × 80/100 ×₹600 ×30/300)	2,30,400
Total (A)		4,53,120
Current Liabilities:		
Creditors for raw material suppliers	(4,800 × ₹180 × 21/300)	60,480
Creditors for packing material	(4,800 × ₹60 × 21/300)	20,160
Creditors for expenses and overheads	(4,800 × ₹120 × 15/300)	28,800
Total (B)		109440
Net Working Capital (A-B)		3,43,680
Add: Cash required(12% of net working capital)		41,242
Total Working Capital required		3,84,922

Question. 5

(a) How is Economic Value Added (EVA) different from Market Value Added (MVA)? **[5]**

(b) The capital structure of Assembly Traders Ltd. as on 31.03.2014 is as follows:

(₹ in crores)

Equity capital(100 lakhs equity shares of ₹10 each)	**10**
Reserves	**2**
14% Debentures of ₹100 each	**3**

For the year ended 31.03.2014 the company has paid equity dividend at 20%. As the company is a market leader with good future, dividend is likely to grow by 5% every year. The equity shares are now treated at ₹80 per share in the stock exchange. Income – tax rate applicable to the company is 50%.

Required:

(I) The current weighted cost of capital.

(II) The company has plans to raise a further ₹5 crores by way of long term loan at 16% interest. When this takes place the market value of the equity shares is expected to fall to ₹50 per share. What will be the new weighted average cost of capital of the company? **[10]**

Answer:

(a) MVA is the excess of market value of the firm as reflected in share price and the value of the debt, over the book value of the capital employed. This book value of the capital employed includes the value of reserves and surplus. The MVA is considered a better measure of corporate performance than the market capitalization.

Mathematically, MVA = Market value of the firm – Capital Employed

EVA can be defined from two perspectives – (a) Accounting and (b) Finance

From the accounting perspective, EVA is defined as the difference between the firm's net operating profits after tax (NOPAT) and its weighted average rupee cost of capital

Since EVA fully accounts for the firm's overall capital costs, it differs from the traditional metrics of financial performance such as EBIT, EBITDA, EAT etc.

Mathematically, EVA = NOPAT – Capital Cost

= NOPAT – (WACC X Capital Employed)

= (r x Capital Employed – c x Capital Employed)

Thus, EVA = (r-c) x Capital Employed

(b)

(I) Current Weighted Average Cost of Capital

(i) Cost of Debt Capital

K_d = I (1-t) = 14% (1 – 0.5) = 7%

(ii) Cost of Equity Capital applying Dividend Growth Model

$K_e = \dfrac{D_1}{P_O} + g = \dfrac{2}{80} + 0.05 = 0.075$ or 7.5%

(iii) Weighted Average Cost of Capital (WACC)

Particulars		₹ Crores	Weight	Cost of funds %
Shareholder's Funds				
Equity capital	10			
Reserves	2	12	0.80	7.5
Debentures (debt)		3	0.20	7.0
Total		15	1.00	

WACC = (Cost of Equity x % of Equity) + (Cost of Debt x % of Debt)

= (7.5 x 0.80) + (7 x 0.20)

= 6 + 1.4

(II) Weighted Average Cost of Capital After Rising Further Debt of ₹ 5 crores

Cost of Existing Debt of ₹ 3 crores = 7%

Cost of New Debt of ₹ 5 crores = 16% (1 – 0.5) = 8%

Cost of Equity = $\dfrac{2}{50} + 0.05$ = 0.09 = 9%

New Capital Structure

Particulars	Amount (₹ Crores)	Weight	Cost of funds %

Shareholders Funds	12	0.60	9
Debentures	3	0.15	7
Long-term loan	5	0.25	8
	20	1.00	

New WACC = (9 x 0.60) + (7 x 0.15) + (8 x 0.25) = 5.4 + 1.05 + 2 = 8.45%

Question. 6

(a) The finance director of Patni Ltd. has been studying exchange rates and interest rates relevant in India and USA. Patni Ltd. has purchased goods from the US Co. at a cost of $ 51 lakhs payable in $ in 3 months time. In order to maintain profit margins the finance director wishes to adopt, if possible a risk free strategy that will ensure that the cost of goods to Patni Ltd. is no more than ₹22crores.
₹/$ (Spot)   40/42
₹/ $ (1 month forward)   41/43
₹/$ (3 months forward)   42/45
Interest rates available to Patni Ltd.

	India (Rates in %)		USA (Rates in %)	
	Deposit	Borrowing	Deposit	Borrowing
1 month	13.00	15.00	7.00	10.00
3 month	13.00	16.00	8.00	11.00

Calculate whether it is possible for Patni Ltd. to achieve a cost directly associated with transaction no more than ₹22 crores, by means of a forward market hedge or money market hedge. Transaction costs may be ignored. **[9]**

(b) The annual interest rate is 5% in the United States and 8% in the UK. The spot exchange rate is £/$ -1.50 and forward exchange rate, with one year maturity, is £/$ =1.48. In view of the fact that the arbitrager can borrow $ 100000 at current spot rate, what would be the arbitrageur profit/loss? **[6]**

Answer:

(a) Option I -Forward Cover
Patni Ltd. to pay $51 lakhs in 3 months time. Thus the company would hedge forward 3 months. Since they need $, the rate applicable will be ₹45/$. Thus their outgo would be ₹51lakhs × 45 = Total Payment = ₹22.95 crores.
Option II-Money Market Hedge
$ is payable by Patni after 3 months. Patni would first borrow rupees @16%, convert to $ in spot, deposit the same @ 8% and use the maturity dollar amount to pay the purchase cost of goods. Since it needs $51 lakhs after 3 months, the amount deposited + interest should equal $51 lakhs. Therefore it would deposit:

$$= \frac{5100000}{1+\dfrac{0.08}{4}} = 50 \text{ lakhs.}$$

Now to get $50 lakhs from rupee proceeds, it would borrow 50 lakhs × 42 (spot rate applicable to purchase $) = ₹21 crores.
Therefore Patni would borrow ₹21 crores.
Total commitment for Patni = ₹21 crores + Interest @ 16% for 3 month
Total payment = ₹21.84 crores.
Since amount under option II is lower & less than ₹22 crores, it is advisable to go for, Money Market Hedge (Option II)

(b) We first verify the interest rate parity to decide, whether any arbitrage exists.

We have spot, 1£ = $1.50

LHS = (1 + r_home country) = 1+ 0.05 = 1.05

RHS = Forward/Spot (1+ r_foreign country)=1.48/1.50 x (1+0.08)=1.0656

Since LHS≠RHS, parity does not exist, and there exists an opportunity to arbitrage.

Since LHS is lower, the borrowing would be done in dollars. The borrowed money would be converted to £ and invested. The profit can be calculated as follows:

Assume borrowing $100000. The repayment would be at the rate of 5% in 12 months i.e. $100000 x 1.05 = $105000.

$100000 converted to £ at spot would yield £66667. This on deposit for 12 months would yield £72000. This converted back to $ would give us $106560.

Thus net arbitrage profit would be = $106560- $105000 = $1560.

Question. 7

(a) What is meant by "Exercising the Option"? What are the implications for a buyer?   [5]

(b) The actual ratios of a company compared to the industry standard are given below. Comment on each ratio and indicate in one or two sentences the nature of action to be taken by the company.   [10]

Ratio	Industry Standard	Actual for the company
Current ratio	**2.2**	**2.7**
Debtors' Turnover Ratio	**6**	**8**
Stock Turnover Ratio	**10**	**3**
Net Profit Ratio	**5%**	**2.4%**
Total debt to total assets	**7.5%**	**40%**

Answer:

(a) The Call option gives the buyer a right to buy the requisite shares on a specific date at a specific price. This puts the seller under the obligation to sell the shares on that specific date and specific price. The Call Buyer exercises his option only when he/she feels it is profitable. This Process is called "Exercising the Option". This leads us to the fact that if the spot price is lower than the strike price then it might be profitable for the investor to buy the share in the open market and forgo the premium paid.

The implications for a buyer are that it is his/her decision whether to exercise the option or not. In case the investor expects prices to rise far above the strike price in the future then he/she would surely be interested in buying call options. On the other hand, if the seller feels that his shares are not giving the desired returns and they are not going to perform any better in the future, a premium can be charged and returns from selling the call option can be used to make up for the desired returns. At the end of the options contract there is an exchange of the underlying asset. In the real world, most of the deals are closed with another counter or reverse deal. There is no requirement to exchange the underlying assets then as the investor gets out the contract just before its expiry.

(b)

Ratio	Comments
Current Ratio	Ideal ratio is 2. The company's position is above the normal value and the industry standard. This may also be due to excessive stock.
Debtors' Turnover Ratio	The industry standard indicates an average collection period of two months, while for the company it is only 1½ months. The company's position is better.
Stock Turnover Ratio	The stock is moving very slowly. Obviously there is excessive stock in the company. Perhaps this has boosted up the current ratio. The sales volume has to be considerably increased and stock level brought down.

Net Profit Ratio	Here the company's performance is very unsatisfactory compared to the overall position in the industry. This calls for steps to get better sales realization and reduction of the cost of production.
Total debt to Total assets	The percentage is disproportionately high in the company indicating a larger proportion of debt in the capital structure. Too high a debt component means too high a risk for equity shareholders.

Question. 8

Write Short Notes on any three of the following [5 × 3]
(a) Euro Convertible Bonds
(b) Money Market Hedge
(c) Greenfield Privatization
(d) Interest Rate Floors

Answer:

(a) A convertible bond is a bond that can be converted into a predetermined amount of the company's equity at certain times during its life, usually at the discretion of the bondholder. A convertible bond is a mix between a debt and equity instrument. It acts like a bond by making regular coupon and principal payments, but these bonds also give the bondholder the option to convert the bond into stock. An Euro convertible bond is a bond issued by a company in a market other than its country of operation. Thus a bond issued by an Indian Company in the foreign market with an option to convert them into pre-determined number of equity shares is a Euro Convertible Bond.

These bonds have two types of options. A call option that would provide the issuer to call back the bonds when the underlying stock price has risen substantially, literally forcing the investors to opt for conversion. The bonds can also give investors an option to opt for conversion by selling the bond, if the bond has a put option. Certain countries do not permit issue of ECBs by its companies since it will add to the external debt of the country.

(b) Money Market Hedge is of two types: (i) hedging payables, and (ii) hedging receivables. Hedging payables involve the following steps:
Borrow funds in home currency; Use them to purchase the foreign currency; Invest the foreign currency for the period after which the foreign currency payable due; Use the proceeds to make the payment; Repay the borrowed amount together with interest. Hedging receivable involves the following steps: Borrow funds in the foreign currency for the period after which the receivable is due; The amount to be borrowed should be equal to the amount of the receivable as discounted by the prevailing rate of interest; Convert the borrowed amount into home currency and use it till the receivable arrives; and if the home currency funds cannot be used gainfully in the enterprise itself, invest them to earn interest.

(c)
- Under new economic policy 1991, concept of privatization of PSEs to improve its efficiency and to reduce the budgetary support and involvement of stage in PSEs
- Releasing large amount of public resources locked up in non-strategic PSEs.
- Stopping further outflow of resources for sustaining unviable PSEs.
- Reducing burgeoning public debt.
- Transferring commercial risk to private sector.
- Disinvested companies would be exposed no market discipline and they would become more efficient and survive or will cease on their own.
- Disinvestment would have a beneficial effect on the capital market.

- New private investor will put in more money in privatized PSEs and economic activity will increase.
- Consumers will be benefited as they would have more choices and cheaper and better quality products and services.

(d) Variable rate investors are the typical users of Interest Rate Floors. They used Floors to obtain certainly for their investments and budgeting process by setting the minimum interest rate they will receive on their investments. By implementing this type of financial management, variable rate investors obtain peace of mind from falling interest rates and the freedom to concentrate on their aspect of their business/investments. An Interest Rate Floor enables variable rate investors to retain the upside advantages of their variable rate investment while obtaining the comfort of a known minimum interest rate.