

FINAL EXAMINATION

GROUP III

(SYLLABUS 2008)

SUGGESTED ANSWERS TO QUESTIONS

JUNE 2013

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. Please

- (i) Answer all bits of a question at one place.
- (ii) Open a new page for answer to a new question.
- (iii) Tick the question number answered on the front sheet of the answer-book.

Answer **Question No. 1** from Part A which is compulsory and **any five** questions from Part B.

PART - A (25 Marks)

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

- (i) What is the opportunity cost of not taking a discount, when the credit terms are 2/20 net 45?
Assume 1 year = 360 days
 - (A) 24.9%
 - (B) 29.4%
 - (C) 22.9%
 - (D) 29.2%
- (ii) E Limited has earnings before interest and taxes (EBIT) of ₹ 10 million at a cost of 7%., Cost of equity is 12.5%. Ignore taxes. What is the overall cost of capital?
 - (A) 11.26%
 - (B) 11.62%
 - (C) 16.12%
 - (D) 12.61%
- (iii) S Limited earns ₹ 6 per share, has capitalisation rate of 10% and has a return on investment at the rate of 20%. According to Walter's model, what should be the price per share at 30% dividend payout ratio?
 - (A) ₹120
 - (B) ₹102
 - (C) ₹112
 - (D) ₹106

- (iv) On January 1, 2012, X Limited's beginning inventory was ₹4,00,000. During 2012, Ltd. purchased ₹19,00,000 of additional inventory. On December 31, 2012, X Ltd.'s ending inventory was ₹5,00,000. What is X Ltd.'s operating cycle in 2012, if it is assumed that the average collection period is 42 days?

(1 year = 36 days).

- (A) 123.3 days
(B) 132.3 days
(C) 126.3 days
(D) 133.3 days

- (v) From the following, what is the amount of sales of A Ltd.? Financial Leverage — 3:1; Interest—₹200; Operating Leverage — 4 : 1; Variable Cost as a % of sales — 66.67%.

- (A) ₹3,600
(B) ₹6,300
(C) ₹6,030
(D) ₹3,060

- (vi) The dollar is currently trading at ₹40. If rupee depreciates by 10%, what will be the spot rate?

- (A) ₹0.0525
(B) ₹0.0552
(C) ₹0.0225
(D) ₹0.0522

- (vii) If the following rates are prevailing: Euro/\$: 1.1916/1.1925 and \$/£ : 1.42/1.47 what will be the cross rate between Euro/Pound?

- (A) 1.6921/1.750
(B) 1.7530/1.6921
(C) 1.6921/1.1925
(D) 1.7530/1.1916

[2x7 = 14 marks]

- (b) State if each of the following sentences is T (= true) or F (= false) : [1x9 = 9 marks]

- (i) Basic lease period refers to the period during which the lease is irrevocable.
(ii) LIBOR for treasury bill rate is the example of basis swaps.
(iii) Provision for taxation is an external source of financing.
(iv) TRIPS are the international agreement on intellectual property rights.
(v) The ROE of an unlevered firm is higher than the ROE of a levered firm, when the ROI is lower than the cost of debt.
(vi) If IRR is less than the firm's cost of capital, the project should be rejected.
(vii) There is no need for calculating separate cost for retained earnings, when cost of equity capital is calculated on the basis of the market value of equity shares.
(viii) In CAPM, systematic risk is the risk that can not be eliminated by diversification, it being common to all firms.
(ix) Interest rate swap is an exchange of interest payments between two parties.

- (c) Match the descriptions to the 'Four kinds of Float' with reference to management of cash:

Descriptions:

- (i) The time when a cheque is being processed by pst office, Messenger service or other means of delivery.
- (ii) The time required to sort, record and deposit the cheque after it has been received by the company.
- (iii) The time from the deposit of cheque to the crediting of funds in the seller's account.
- (iv) The time between the sale and the mailing of the invoice.
- Four kinds of Float—Management of cash:
- (A) Billing Float
- (B) Banking processing Float
- (C) Cheque processing Float
- (D) Mailing Float

Note: Your answer may be of the form:

Description No.....Capital letter of the alternative indicating kind of float. [$\frac{1}{2} \times 4 = 2$ marks]

Answer 1.

(a) (i) (B) 29.4%

$$\begin{aligned} \text{Opportunity cost} &= \frac{\text{discount percent}}{100 - \text{discount percent}} \times \frac{360}{N} \\ &= \frac{2}{98} \times \frac{360}{25} = 29.4\% \end{aligned}$$

(ii) (A) 11.26%

$$\begin{aligned} \text{Market Value of equity (S)} &= \frac{\text{EBIT} - I}{k_e} = \frac{\text{₹}10,000,000 - 1,400,000}{0.125} \\ &= \text{₹}68,800,000 \end{aligned}$$

$$\begin{aligned} \text{Total value of Firm (V)} &= S + D = \text{₹}68,800,000 + \text{₹}20,000,000 \\ &= \text{₹}88,800,000 \end{aligned}$$

$$\therefore \text{Overall cost of capital (K}_0\text{)} = \frac{\text{EBIT} - I}{V} = \frac{\text{₹}10,000,000}{\text{₹}88,800,000} = 11.26\%$$

(iii) (B) ₹102

$$\text{Market Value of share (P)} = \frac{D + \frac{r}{k_e}(E - D)}{k_e} = \frac{1.80 + \frac{0.20}{0.10}(6 - 1.80)}{0.10} = \text{₹}102$$

(iv) (D) 133.3 days

$$\begin{aligned} \text{Cost of goods sold} &= \text{₹}(4,00,000 + 1,900,000 - 500,000) \\ &= \text{₹}1,800,000 \end{aligned}$$

$$\text{Inventory turnover} = \frac{\text{₹}1,800,000}{\text{₹}450,000} = 4$$

$$\text{Average age of Inventory} = \frac{365}{4} = 91.3 \text{ days}$$

$$\therefore \text{Operating cycle} = \text{Average age inventory} + \text{Average Collection Period} \\ = 91.3 + 42 = 133.3 \text{ days}$$

(v) (A) ₹3,600

$$\text{Financial Leverage} = \frac{\text{EBIT}}{\text{EBT}} = \frac{3}{1}$$

$$\text{EBIT} = 3\text{EBT}$$

$$\text{EBIT} - 200 = \text{EBT}$$

$$\text{EBIT} = 3[\text{EBIT} - 200]$$

$$\therefore \text{EBIT} = \text{₹}300$$

$$\text{Operating Leverage} = \frac{S - V}{\text{EBIT}} = \frac{4}{1}$$

$$S - V = 4 \text{ EBIT} = 4 \times 300 = 1200$$

$$(100 - 66.67\%)S = 1200$$

$$\therefore \text{Sales} = \frac{1200}{33\frac{1}{3}\%} = \text{₹}3600$$

(vi) (C) ₹0.0225

$$\text{Re quote : Re.1} = \$1/40 = 0.025$$

$$\text{If rupee depreciates by 10\%, then} = 0.025 - 0.0025 = \text{₹}0.0225$$

(vii) (A) 1.6921/1.7530

$$\text{Bid (Euro/£)} = \text{Bid (Euro/\$)} \times \text{Bid (\$/£)}$$

$$\text{Bid rate for } \text{€} / \text{£} = 1.1916 \times 1.42 = 1.6921$$

$$\text{Ask rate for } \text{€} / \text{£} = 1.1925 \times 1.47 = 1.7530$$

$$\therefore \text{Quote as } \text{€} / \text{£} = 1.6921/1.7530$$

(b)

(i) True

(ii) True

(iii) False

(iv) True

(v) True

(vi) True

(vii) True

(viii) True

(ix) True

(x) True

(c)

(i) D = Mailing Float

(ii) C = Cheque Processing Float

(iii) B = Banking Processing Float

(iv) A = Billing Float

PART - B (75 Marks for any five questions)

2. (a) AMRITAM Ltd. has a total sales of ₹ 3.2 crores and its average collection period is 90 days. The past experience indicates that bad debts losses are 1.5% on sales. The expenditure incurred by the firm in administering its receivable collection efforts is ₹ 5,00,000. A factor is prepared to buy the firm's receivables by charging 2% commission. The factor will pay advance on receivables to the firm at an interest rate of 18% per annum after withholding 10% as reserve. Assume 360 days in a year. Calculate the effective cost of factoring to the firm. [10]

(b) State the main features of venture capital. [5]

Answer 2.

(a)

Particulars	₹
Average level of receivables = ₹3.2 crores $\times \frac{90}{360}$	80,00,000
Factoring commission = ₹80 lakhs $\times \frac{2}{100}$	1,60,000
Factoring reserve = ₹80 lakhs $\times 10\%$	8,00,000
Amount available for advance = ₹[80 - (1.6 + 8)] lakhs	70,40,000
Factor will deduct his interest @ 18% = $\frac{₹70.4 \text{ lakhs} \times 18 \times 90}{100 \times 360}$ = ₹3,16,800	
∴ Advance to be paid = ₹(70,40,000 - 3,16,800)	67,23,200
Annual cost of factoring to the firm:	
Factoring commission = ₹1,60,000 $\times \frac{360}{90}$	6,40,000
Interest charges = ₹3,16,800 $\times \frac{360}{90}$	12,67,200
Total	19,07,200
Firm's saving on taking factoring service:	
Cost of credit administration saved	5,00,000
Cost of Bad debts = ₹3.20Cr. $\times \frac{1.5}{100}$ avoided	4,80,000
Total	9,80,000

Net cost to the firm = ₹(19,07,200 - 9,80,000) = ₹9,27,200

Effective rate of interest to the firm = $\frac{\text{Net cost}}{\text{Advance to pay}} \times 100 = \frac{₹9,27,200}{₹67,23,200} \times 100$
= 13.79%

(b) Main features of venture capital are:

- (i) High degree of risk : An investment in a highly risk project with the objective of earning a high rate of return.
- (ii) Equity participation : An actual or potential equity participation to make capital gain by selling the share once the project becomes profitable.
- (iii) Long- term investment : It takes a long period to encash the investment in securities made by venture capitalists.
- (iv) Participation in management : Takes an active interest in management than

of a traditional lender or banker. "venture capital combines the qualities of banker, stock market investor and entrepreneur in one."

- (v) Management buying : are funds provided to enable an outside group of managers to buy an existing company.
- (vi) Management buyouts : Venture capital institutions provide funds to enable the current operating management/investors to acquire existing product line/ business.

3. (a) VEDAVYAS Ltd. is considering two mutually exclusive projects M and project N. The Finance Director thinks that the project with higher NPV should be chosen, whereas the Managing Director thinks that the one with the higher IRR should be undertaken, especially as both projects have the same initial outlay and length of life. The company anticipates a cost of capital of 10% and the net after-tax cash flow of the projects are as follows:

Year	0	1	2	3	4	5
Cash flows (₹)						
Project M	(4,00,000)	70,000	1,60,000	1,80,000	1,50,000	40,000
Project N	(4,00,000)	4,36,000	20,000	20,000	8,000	6,000

You are required to:

- (i) Calculate the NPV and IRR of each project.
- (ii) State with reasons, which project you would recommended.
- (iii) Explain the inconsistency in the ranking of the two projects.

Present value Table is given :

Year	0	1	2	3	4	5
PVIF at 10%	1.000	0.909	0.826	0.751	0.683	0.621
PVIF at 20%	1.000	0.833	0.694	0.579	0.482	0.402

$$(3+4)+2+1=10$$

(b) As an executive of a lending institution, what factors should you critically evaluate with respect to a large industrial project, from the perspectives of environmental and economic viability? [5]

Answer 3.

(a) (i) Calculation of NPV and IRR

NPV of Project M:

year	Cash Flows (₹)	Discount factor (10%)	Discounted Values(₹)	Discount factor (20%)	Discounted Values (₹)
0	(4,00,000)	1.000	(4,00,000)	1.000	(4,00,000)
1	70,000	0.909	63,630	0.833	58,310
2	1,60,000	0.826	1,32,160	0.694	1,11,040
3	1,80,000	0.751	1,35,180	0.579	1,04,220
4	1,50,000	0.683	1,02,450	0.482	72,300
5	40,000	0.621	24,840	0.402	16,080
NPV			58,260		(38,050)

IRR of Project M:

At 20%, NPV is (-) 38,050 and at 10% NPV is 58,260

$$\therefore \text{IRR} = 10 + \frac{58260}{58260 + 38050} \times 10 = 10 + \frac{58260}{96310} \times 10 = 10 + 6.05 = 16.05\%$$

NPV of Project N:

year	Cash Flows (₹)	Discount factor (10%)	Discounted Values(₹)	Discount factor (20%)	Discounted Values (₹)
0	(4,00,000)	1.000	(4,00,000)	1.000	(4,00,000)
1	4,36,000	0.909	3,96,324	0.833	3,63,188
2	20,000	0.826	16,520	0.694	13,880
3	20,000	0.751	15,020	0.579	11,580
4	8,000	0.683	5,464	0.482	3,856
5	6,000	0.621	3,726	0.402	2,412
NPV			37,054		(5,084)

IRR of Project M:

At 20%, NPV = (-) 5,084 and at 10% NPV = 37,054

$$\therefore \text{IRR} = 10 + \frac{37054}{37054 + 5084} \times 10 = 10 + \frac{37054}{42138} \times 10 = 10 + 8.79\% = 18.79\%$$

- (ii) Both the projects are acceptable because they generate the positive NPV at the company's cost of capital at 10%. However, the company will have to select PROJECT M because it has higher NPV. If the company follows IRR method, then PROJECT N should be selected because of higher internal rate of return (IRR). But when NPV and IRR give contradictory results, a project with higher NPV is generally preferred because of higher return in absolute terms. Hence, Project M should be selected.
- (iii) The inconsistency in the ranking of the projects arises because of the difference in the pattern of the cash flows. Project M's major cash flow occur mainly in the middle three years whereas project N generated the major cash flow in the first year itself.
- (b) Factors to consider to consider for critical evaluation of a large industrial projects, from the perspectives of environmental and economic viability are:
- Employment potential.
 - Utilisation of domestically available raw material and other facilities.
 - Development of industrially backward areas as per government policy.
 - Effect of the project on the environment with particular emphasis on the pollution of water and air to be caused by it.
 - Arrangements for effective disposal of effluent as per government policy.
 - Energy conservation devices, etc. employed for the project.
- Other economic factors that influence the final approval of a particular project are:
- Internal Rate of return (IRR) and Domestic resources Cost (DRC)

4. (a) M/s Circuit Manufacturing Corporation (CMC) furnishes the following information:

Total Sales : 1,45,000 units

Selling price per unit : ₹ 23

Fixed Cost : ₹ 2,80,000

Variable Cost : ₹ 17 per unit

Debt : ₹ 10,00,000 @ 11% interest rate

Equity : ₹ 20,00,000

Face Value of each share : ₹10

Tax rate applicable : 45%

You are required to work out the following:

- (i) By what amount the firm's sales have to come down, so that the Earnings Before Taxes is equal to zero?
- (ii) If Earnings Before Interest & Taxes (EBIT) double, what is the new level of Earnings Before Taxes (EBT)?
- (iii) What will be the degree of operating, financial and combined leverage?
- (iv) If the asset turnover of the industry is 0.75, does the firm have a high or low degree of asset turnover? [3+2+3+2=10]

(b) What are the basic financial decisions? How do they involve risk-return trade off? [5]

Answer 4.

(a)

- (i) Turn of the firm = ₹23 x 145000 = ₹33,35,000
 Total cost = ₹17 x 145000 + ₹280000 = ₹27,45,000
 EBIT = ₹(33,35,000 – 27,45,000) = ₹5,90,000
 Interest Charges = ₹10,00,000 x 0.11 = ₹1,10,000

If the earning before taxes is equal to Zero,

EBIT should be equal to interest charges.

Let this happen at a sales level of X units.

Profit function (EBIT) = (SP – VC)X – FC;

Then, ₹(23-17) X - ₹2,80,000 = ₹1,10,000

Or, $X = \frac{₹3,90,000}{₹6} = 65,000$ Units

Or, Sales required = $\frac{\text{Required EBIT} + \text{FC}}{\text{Contribution per unit}} = \frac{110000 + 280000}{6} = 65000$ Units.

Therefore, the sales should come down by (145000 – 65000) or 80000 units, or by (₹80,000 x ₹23) or ₹18,40,000, so that EBT is equal to Zero.

- (ii) If EBIT doubles, the new level of EBIT would be equal to ₹(2 x 5,90,000) = ₹11,80,000

New level of EBT = EBIT – I = ₹11,80,000 – ₹1,10,000 = ₹10,70,000

- (iii) Degree of operating leverage –

$$= \frac{Q(SP - VC)}{Q(SP - VC) - F} = \frac{145000(23 - 17)}{145000(23 - 17) - 280000} = 1.475$$

Degree of financial leverage is $\frac{\text{EBIT}}{\text{EBIT} - I}$

$$\text{Hence, DFL} = \frac{590000}{590000 - 110000} = 1.23$$

Combined leverage = DOL x DFL = 1.475 x 1.23 = 1.814

- (iv) Turnover of the firm = ₹23 x 145000 = ₹3335000

The asset turnover of the firm is $\frac{\text{Total sales}}{\text{Total assets}} = \frac{3335000}{(1000000 + 2000000)} = 1.11$

Since, the asset turnover of the industry is 0.75, the firm is considered to have a high degree of asset turnover. (It is assumed that the firm has no other liabilities. Therefore, Total Asset = debt + Equity).

(b) (i) Investment Decision: Concerned with the selection of assets (fixed and current) in which funds will be invested by a firm – Long-term investment decision is known as capital budgeting and short-term investment decision (current assets) is identified as working capital management – Proper trade – off between liquidity and profitability.

(ii) Financing decision: Concerned with capital structure of firm – trade off between risk and return by maintaining a proper balance between debt and equity capital.

(iii) Dividend Decision: Concerned with the distribution of profits of firm to the share holders. It will depend upon the preference of the shareholders, investment opportunities available within the firm and opportunities for future expansion of the firm.

5. (a) Determine the working capital requirements on cash cost basis from the following particulars:

Annual Budget for	Amount (₹ in lakh)
Raw Materials	720
Supplies and Components	240
Manpower Expenses	480
Factory Expenses (including depreciation ₹ 10 lakhs)	130
Administration Expenses	180
Sales	2380

You are given the following additional information:

- (i) Stock-levels planned : Raw materials— 30 days; supplies and components— 90 days.
 - (ii) 50 per cent of the sales are for cash; for the remaining, 20 days credit is normal.
 - (iii) Finished goods are held in stock for a period of 7 days before they are released for sale and are valued at factory cost.
 - (iv) Goods remain in process for 5 days. Materials & components are supplied in the beginning and expenses are incurred evenly.
 - (v) The company enjoys 30 days credit facilities on 20 per cent of the purchases.
 - (vi) Cash and Bank balances had been planned to be kept at the rate of half month's budgeted expenses [Assume 360 days in a year]. [10]
- (b) Discuss the important factors that affect the dividend policy of a firm. [5]

Answer 5.**(a) Statement showing the requirements of working capital (in lakhs):**

Particulars		₹
A. Current Assets		
Stock of Raw materials = $720 \times \frac{30}{360}$		60.00
Stock of supplies & components = $240 \times \frac{90}{360}$		60.00
Stock of WIP		
RM = $720 \times \frac{5}{360} \times 100\%$	10.00	
Supplies = $240 \times \frac{5}{360} \times 100\%$	3.33	
Wages = $480 \times \frac{5}{360} \times 50\%$	3.33	
F. expenses = $120 \times \frac{5}{360} \times 50\%$	0.84	
		17.50
Stock of Finished Goods = $(720 + 240 + 480 + 120) \times \frac{7}{360}$		30.33
<u>Debtors:</u>		
Cost of goods produced (720 + 240 + 480 + 120)	1560	
(+) Op. F. Stock	30.33	
(-) Cl. F. Stock	(30.33)	
(+) Office expenses	180	
	1740	
Cost of credit Sales	$1740 \times \frac{50}{100}$	
	$870 \times \frac{20}{360}$	48.33
Cash in hand $(480 + 120 + 180) \times \frac{15}{360}$		32.50
Total Current Assets		248.66

Particulars		₹
B. Current Liabilities		
Creditors for raw materials	$720 \times \frac{20}{100} \times \frac{30}{360}$	12.00
Creditors for supplies and component	$240 \times \frac{20}{100} \times \frac{30}{360}$	4.00
Total current liabilities		16.00
C. Net Working Capital (A-B)		232.66

(b) Factors determining the Dividend policy of a company

- (a) Cash flow situation of the company based on its current and future needs of funds.
- (b) Expectation of shareholders and performance by similar industries.
- (c) Constraints in payment of Dividend, Legal requirements
- (d) Investment opportunities available to the company and its benefits vis-a-vis funding requirement
- (e) Trends in capital market
- (f) Ownership pattern of the company.

6. (a) The following quotes are available.

Spot (\$/Euro)	0.8385/0.8391
3-m swap points	20/30
Spot (\$/Pound)	1.4548/1.4554
3-m swap points	35/25

Find the 3-m (€/£) outright forward rates:

[5]

(b) Compute a call option price by applying the Black-Scholes Option Pricing model on the following values:

Strike price	= ₹ 45
Time remaining to expiration	= 183 days
Current stock price	= ₹ 47
Expected price volatility	= standard deviation of the stock's return = 0.25
Risk free rate	= 10%

Given : $N(0.6172) = 0.7315$ and $N(0.4404) = 0.6702$.

[5]

(c) What is swaps? Explain its necessity. Also state financial benefits created by swap transactions.

[5]

Answer 6.

(a) Given \$/€ = 0.8385 / 0.8391 3M fwd = 0.8405 / 0.8421

(Swap points ascending order → add to find forward rates)

\$/£ = 1.4548/1.4554 3M fwd = 1.4513 / 1.4529

(Swap points descending order → deduct to find forward rates)

To find € /£ (3M outright forward rates)

Bid (€/£) = Bid (€/\$) x Bid (\$/£)

We do not have a quote of € /\$, instead we have \$/€.

Bid (€/£) = 1/Ask(\$/€) x Bid(\$/£)

Substituting the values,

Bid rate for € /£ = 1/0.8421 x 1.4513 = 1.7234

Similarly Ask (€/£) = 1/Bid(\$/€) x Ask(\$/£)

= 1/0.8405 x 1.4529 = 1.7286

∴ 3M outright forward rates (€/£) = 1.7234 / 1.7286

(b) Applying the Black - Scholes formula:

$$V_c = P_s [Nd_1 - \frac{P_x}{e^{(RF)(T)}} Nd_2]$$

$$d_1 = \frac{\ln[47/45] + [0.10 + 0.5(0.25)^2]0.5}{0.25\sqrt{0.5}}$$

$$d_2 = 0.6172 - 0.25\sqrt{0.5} = 0.4404$$

$$\begin{aligned} \text{Then, } C &= 47(0.7315) - 45(e^{-0.10(0.5)})(0.6702) \\ &= ₹5.69 \end{aligned}$$

(c) Swaps Exchange of one obligation with another -- Financial swaps are funding technique, which permit a borrower to access one market and exchange the liability for another market / instrument - exchange one type of risk with another.

Necessity -

1. Difference in borrowers and investors preference and market access
2. Low cost device
3. Market saturation
4. Differences in financial norms followed by different countries.

Financial Benefits Created by Swap Transactions

- o The Theory of Comparative Advantage
- o Information asymmetries.

7. (a) Considering the following quotes.

Spot (Euro/Pound) = 1.6543/1.6557

Spot (Pound/NZ\$) = 0.2786/0.2800

(i) Calculate the % spread on the Euro/Pound Rate

(ii) Calculate the % spread on the Pound/NZ\$ Rate

(iii) The maximum possible % spread on the cross rate between the Euro and the NZ\$.

[1+1+3=5]

(b) A company operating in JAPAN has today effected sales to an Indian company, the payment being due 3 months from the date of invoice. The invoice amount is 108 lakhs yen (¥). At today's spot rate, it is equivalent to ₹30 lakhs. It is anticipated that the exchange rate will decline by 10% over the 3 months period and in order to protect the yen (¥) payments, the importer proposes to take appropriate action in the foreign exchange market. The 3 months forward rate is presently quoted as 3.3 yen per rupee. You are required to calculate the expected loss and to show how it can be hedged by a forward contract. [5]

(c) Explain the major functions and features of WTO and GATT. [5]

Answer 7.

(a) (i) The % spread on Euro/Pound = $\frac{1.6557 - 1.6543}{1.6543} \times 100 = 0.085\%$

(ii) % Spread on the Pound/NZ\$ = $\frac{0.2800 - 0.2786}{0.2786} \times 100 = 0.50\%$

(iii) The maximum possible % spread on the cross rate between € & NZ\$

To find out cross rate first

Given Spot (Euro/Pound) = 1.6543 / 1.6557

Spot (Pound/NZ\$) = 0.2786 / 0.2800

Spot (Euro/NZ\$) = 0.2786 x 1.6543 / 0.2800 x 1.6557

$$= 0.4609 / 0.4636$$

$$\text{The maximum \% spread on Euro/ NZ\$} = \frac{0.4636 - 0.4609}{0.4609} \times 100 = 0.59\%$$

- (b) Spot rate of Re.1 against ¥ = 108 Lakhs ¥ / ₹30 lakhs = 3.6 ¥
 3 months forward rate of Re.1 against ¥ = 3.3¥
 Anticipated decline in Exchange rate = 10%
 ∴ Expected Spot Rate after 3 months = ¥(3.6-10% of 3.6) per Re.
 = ¥(3.6-0.36) = ¥3.24 per Re.

Particulars	₹(in Lakhs)
Present cost of ¥108 lakhs	30
Cost after 3 months = ¥ 108/¥3.24	33.33
Expected Exchange Loss	3.33
If the expected exchange rate risk is hedged by a Forward Contract:	
Present Cost	30
Cost after 3 months if Forward Contract is taken ¥108 Lakhs/¥3.3	32.73
Expected Loss	2.73

If the exchange rate risk is not covered with forward contract, the expected exchange loss is ₹3.33 lakhs. This could be reduced to ₹2.73 lakhs if it is covered with Forward Contract. Hence, taking Forward Contract is suggested.

(c) Functions of WTO/GATT:

1. Administering its trade agreements
2. Being a forum for trade negotiations
3. Monitoring national trade policies
4. Providing technical assistance and training for developing countries
5. Cooperating with other international organisations.

Major features of WTO and GATT :

1. Formed in' 1995 - 152 member states
2. Designed to supervise and liberalise international trade
3. Deals with rules of trade between nations at a global level
4. Responsible for negotiating and implementing new trade agreement
5. Governed by a Ministerial Conference.

8. Write short notes on (any three) :

(a) Foreign Currency Convertible Bonds (FCCBs);

(b) Money Market Hedge;

(c) Trading Blocks;

(d) Factors which discourage FDIs in India.

5 x 3 = 15

Answer 8.

(a) Foreign Currency Convertible Bonds (FCCBs): They mean bonds issued in accordance with relevant scheme and subscribed by a non-resident in foreign currency and convertible into depository receipts or ordinary shares of the issuing company in any manner, either in whole or in part, on the basis of any equity-related warrants attached to debt instruments. A company seeking to issue FCCBs should have consistent track record of good performance for 3 years.

FCCBs are unsecured; carry a fixed rate of interest and an option for conversion into a fixed number of equity shares of the issuer company. Interest on redemption price (if conversion option is not exercised) is payable in Dollars. Interest rates are very low by Indian domestic standards.

FCCB has been popular with issuers. Local debt markets can be restrictive with comparatively short maturities and high interest rates. On the other hand, a straight equity may cause a dilution in earnings, and certainly dilutions in control, which many shareholders, especially major family shareholders, would find unacceptable. Foreign investors also prefer FCCBs because of dollar-denominated servicing, the conversion option and the arbitrage opportunities presented by conversion of FCCBs into equity at discount on prevailing market-price in India. The major drawbacks are that the issuing company cannot plan capital structure as it is not assured of conversion of FCCBs. In addition, FCCBs would result in creation of external debt for the country, as there would be foreign exchange outflow from the country, if conversion option is not exercised by the investors.

Some other regulations are: (i) Interest payment on bond, until the conversion option is exercised, shall be subjected to TDS; (ii) Conversion of FCCBs into shares shall not give rise to capital gain in India; and (iii) Transfer of FCCBs shall not give rise to capital gain in India.

(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) A trading block is a preferential economic arrangement between a group of countries that reduces the intra-regional barriers to trade in goods, services, investment and capital. There are more than 50 such arrangements at the present time. There are five major forms of economic cooperation among different countries; free trade areas, customs unions, common markets, economic unions and political unions.

The North American Free Trade Agreement (NAFTA) among USA, Canada and Mexico is example of free trade areas where member countries remove all trade barriers among themselves.

(d) Factors that discourage FDTs in India

- High rates of taxation
- Lack of Infrastructure facilities
- Favouritism in the selection of investment
- Complicated legal framework of rules regulations procedures for FDI into India
- Lack of transparency