

MOCK TEST PAPER
FINAL (OLD) COURSE: GROUP – I
PAPER – 2: STRATEGIC FINANCIAL MANAGEMENT
SUGGESTED ANSWERS/HINTS

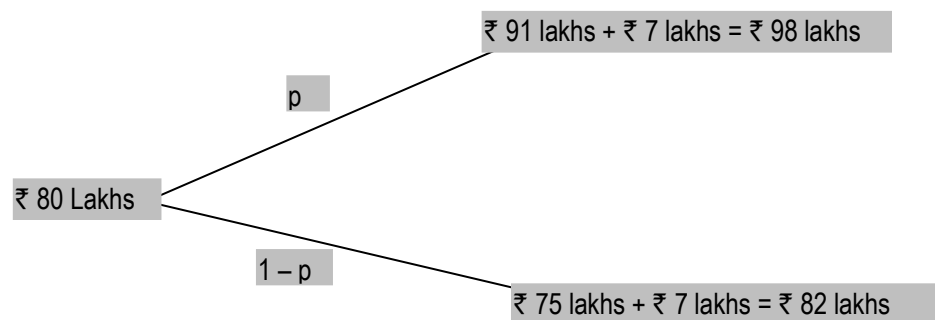
1. (a) Presently 10 units apartments shall yield a profit of ₹ 200 lakh (₹ 800 lakhs – ₹ 600 lakhs) and 15 unit apartment will yield a profit of ₹ 175 lakh (₹ 1200 lakhs – ₹ 1025 lakhs). Thus 10 units apartment is the best alternative if Ramesh has to construct now.

However, Ramesh waits for 1 year his pay-off will be as follows:

	Market Conditions	
	Buoyant Market	Sluggish Market
10 units apartments	₹ 91 lakhs X 10 – ₹ 600 lakhs = ₹ 310 lakhs	₹ 75 lakhs X 10 – ₹ 600 lakhs = ₹ 150 lakhs
15 units apartments	₹ 91 lakhs X 15 – ₹ 1025 lakhs = ₹ 340 lakhs	₹ 75 lakhs X 15 – ₹ 1025 lakhs = ₹ 100 lakhs

Thus if market conditions turnout to be buoyant the best alternative is 15 units apartments and net pay-off will be ₹ 340 lakhs and if market turnout to be sluggish the best alternative is the 10 units apartments and net pay-off shall be ₹ 150 lakhs.

To determine the value of vacant plot we shall use Binomial Model (Risk Neutral Method) of option valuation as follows:



Alternatively student can calculate these values as follows (Sale Value + Rent):

If market is buoyant then possible outcome = ₹ 91 lakh + ₹ 7 lakh = ₹ 98 lakhs

If market is sluggish then possible outcome = ₹ 75 lakh + ₹ 7 lakh = ₹ 82 lakhs

Let p be the probability of buoyant condition then with the given risk-free rate of interest of 10% the following condition should be satisfied:

$$₹ 80 \text{ lakhs} = \frac{[(p \times ₹ 98 \text{ lakhs}) + (1-p) \times ₹ 82 \text{ lakhs}]}{1.10}$$

$$p = \frac{3}{8} \text{ i.e. } 0.375$$

Thus $1-p = 0.625$

Expected cash flow next year

$$0.375 \times ₹ 340 \text{ lakhs} + 0.625 \times ₹ 150 \text{ lakhs} = ₹ 221.25 \text{ lakhs}$$

Present Value of expected cash flow:

$$₹ 221.25 \text{ lakhs} (0.909) = ₹ 201.12 \text{ lakhs}$$

Thus, the value of vacant plot is ₹ 201.12 lakhs

Since the current value of vacant land is more than profit from 10 units apartments now (₹ 200 lakh) the land should be kept vacant.

- (b) (i) The optional hedge ratio to minimize the variance of Hedger's position is given by:

$$H = \rho \frac{\sigma_S}{\sigma_F}$$

Where

σ_S = Standard deviation of ΔS (Change in Spot Prices)

σ_F = Standard deviation of ΔF (Change in Future Prices)

ρ = coefficient of correlation between ΔS and ΔF

H = Hedge Ratio

ΔS = change in Spot price.

ΔF = change in Future price.

Accordingly

Standard deviation of $\Delta S = \sqrt{16\%} = 4\%$ and

Standard deviation of $\Delta F = \sqrt{36\%} = 6\%$ and

$$H = 0.75 \times \frac{0.04}{0.06} = 0.5$$

- (ii) Since the company is long position in Spot (Cash) Market it shall take Short Position in Future Market.

- (iii) Since contract size of one contract is 1,000 Kg, the

$$\text{No. of contract to be short} = \frac{10,000 \text{ Kgs}}{1,000 \text{ Kgs}} \times 0.50 = 5 \text{ Contracts}$$

$$\text{Amount} = 5000 \times ₹ 534 = ₹ 26,70,000$$

(c) Walter Model is
$$V_c = \frac{D + \frac{R_a}{R_c} (E - D)}{R_c}$$

Where:

V_c = Market value of the share

R_a = Return on Retained earnings

R_c = Capitalisation Rate

E = Earning per share

D = Dividend per share

Hence, if Walter model is applied

$$\text{Market Value of the Share} = \frac{1.80 + \frac{.20}{.10} (6 - 1.80)}{0.10} \quad P = \frac{1.80 + \frac{.20}{.10} (4.20)}{0.10}$$
$$P = \frac{1.80 + 8.40}{0.10} \quad P = ₹ 102$$

This is not the optimum payout ratio because $R_a > R_c$ and therefore V_c can further go up if payout ratio is reduced.

(d) Nominal Interest or Bond Equivalent Yield = $\left[\frac{F-P}{P} \right] \times \frac{12}{M} \times 100$

Where

F= Face Value

P= Issue Price

$$= \frac{1,00,000 - 97,550}{97,550} \times \frac{12}{3} \times 100 = 0.025115 \times 4 \times 100 = 10.046 = 10.05\% \text{ p.a.}$$

$$\text{Effective interest rate} = \left[1 + \frac{0.1005}{4} \right]^4 - 1 = 10.435\% \text{ p.a.}$$

Cost of Funds to the Company

Effective Interest	10.435%
Brokerage (0.150 × 4)	0.60%
Rating Charge	0.50%
Stamp duty (0.175 × 4)	<u>0.70%</u>
	<u>12.235%</u>

Alternatively, effective interest rate can also be computed as follows:

Let i be the interest rate then

$$97,750 = \frac{100000}{1 + i \times \frac{3}{12}}$$

$$i = 10.046$$

Cost of Funds to the Company

Effective Interest	10.046%
Brokerage (0.150 × 4)	0.60%
Rating Charge	0.50%
Stamp duty (0.175 × 4)	<u>0.70%</u>
	<u>11.846%</u>

2. (a) **Exchange Position:**

Particulars	Purchases (GBP)	Sales (GBP)
Opening Balance Overbought	1,00,000	
Bill on London	1,60,000	
Forward Sales – TT		1,20,000
Cancellation of Forward Contract		60,000
TT Sales		1,50,000
Draft on London cancelled	60,000	—
	3,20,000	3,30,000
Closing Balance Oversold	10,000	—
	3,30,000	3,30,000

Cash Position (Nostro A/c)

	Credit	Debit
Opening balance credit	2,00,000	—
TT sales	—	1,50,000
	2,00,000	1,50,000
Closing balance (credit)	—	50,000
	2,00,000	2,00,000

The Bank has to buy spot TT GBP 15,000 to increase the balance in Nostro account to GBP 65,000.

This would bring the overbought position on GBP to 5,000.

Since the bank requires an oversold position of GBP 20,000, it has to sell forward GBP 25,000.

(b) **Proposal 1**

The loan amount is repayable together with the interest at the rate of 14% on loan amount and is repayable in equal installments at the end of each year. The PVAF at the rate of 14% for 5 years is 3.433, the amount payable will be

$$\text{Annual Payment} = \frac{\text{Rs. } 100,00,000}{3.433} = ₹ 29,12,904 \text{ (rounded)}$$

End of Year	Total Payment ₹	Interest ₹	Principal ₹	Principal Amount Outstanding ₹
1	29,12,904	14,00,000	15,12,904	84,87,096
2	29,12,904	11,88,193	17,24,711	67,62,385
3	29,12,904	9,46,734	19,66,170	47,96,215
4	29,12,904	6,71,470	22,41,434	25,54,781
5	29,12,904	3,58,123*	25,54,781	-----

* Balancing Figure

Schedule of Cash Outflows: Debt Alternative

(Amount in ₹)

(1)	(2)	(3)	(4)	(3) + (4)	(5)	(6)	(7)	(8)
End of year	Debt Payment	Interest	Dep		Tax Shield [(3)+(4)] 0.50	Cash outflows (2) – (5)	PV factors @ 7%	PV
1	29,12,904	14,00,000	18,00,000	32,00,000	16,00,000	13,12,904	0.935	12,27,565
2	29,12,904	11,88,193	18,00,000	29,88,193	14,94,097	14,18,807	0.873	12,38,619
3	29,12,904	9,46,734	18,00,000	27,46,734	13,73,367	15,39,537	0.816	12,56,262
4	29,12,904	6,71,470	18,00,000	24,71,470	12,35,735	16,77,169	0.763	12,79,680
5	29,12,904	3,58,123	18,00,000	21,58,123	10,79,062	18,33,842	0.713	13,07,529
								63,09,655

Total present value of Outflows = ₹ 63,09,655

Proposal 2

(1)	(2)	(3)	(4)	(5)	(6)
End of year	Lease Rent	Tax Shield	Cash outflows (2) – (3)	PV factors @ 7%	PV
1	18,00,000	9,00,000	9,00,000	0.935	8,41,500
2	20,00,000	10,00,000	10,00,000	0.873	8,73,000
3	22,00,000	11,00,000	11,00,000	0.816	8,97,600
4	24,00,000	12,00,000	12,00,000	0.763	9,15,600
5	26,00,000	13,00,000	13,00,000	0.713	9,26,900
					44,54,600

Since PV of outflows is lower in the Leasing option, Robust Tech should go for leasing option to acquire printer.

3. (a) (i) Earning per share of company MK Ltd after merger:-

Exchange ratio 160 : 200 = 4 : 5.

that is 4 shares of MK Ltd. for every 5 shares of NN Ltd.

∴ Total number of shares to be issued = $4/5 \times 3,00,000 = 2,40,000$ Shares.

∴ Total number of shares of MK Ltd. and NN Ltd. = 12,00,000 (MK Ltd.) + 2,40,000 (NN Ltd.)

= 14,40,000 Shares

Total profit after tax = ₹ 60,00,000 MK Ltd.

= ₹ 18,00,000 NN Ltd.

= ₹ 78,00,000

∴ EPS. (Earning Per Share) of MK Ltd. after merger

₹ 78,00,000 / 14,40,000 = ₹ 5.42 per share

(ii) To find the exchange ratio so that shareholders of NN Ltd. would not be at a Loss:

Present earning per share for company MK Ltd.

= ₹ 60,00,000 / 12,00,000 = ₹ 5.00

Present earning per share for company NN Ltd.

$$= ₹ 18,00,000/3,00,000 = ₹ 6.00$$

∴ Exchange ratio should be 6 shares of MK Ltd. for every 5 shares of NN Ltd.

∴ Shares to be issued to NN Ltd. = $3,00,000 \times 6/5 = 3,60,000$ shares

Now, total No. of shares of MK Ltd. and NN Ltd. = $12,00,000$ (MK Ltd.) + $3,60,000$ (NN Ltd.)
= $15,60,000$ shares

∴ EPS after merger = $₹ 78,00,000/15,60,000 = ₹ 5.00$ per share

Total earnings available to shareholders of NN Ltd. after merger = $3,60,000$ shares $\times$ $₹ 5.00 = ₹ 18,00,000$.

This is equal to earnings prior merger for NN Ltd.

∴ Exchange ratio on the basis of earnings per share is recommended.

(b) (i) Number of Units in each Scheme

MF 'X'	$\frac{₹ 2,00,000}{₹ 10.30}$	= 19,417.48
MF 'Y'	$\frac{₹ 4,00,000}{₹ 10.10}$	= 39,603.96
MF 'Z'	$\frac{₹ 2,00,000}{₹ 10.00}$	= 20,000.00

(ii) Total NAV on 31.03.2018

MF 'X'	= 19,417.48 $\times$ ₹ 10.25	₹ 1,99,029.17
MF 'Y'	= 39,603.96 $\times$ ₹ 10.00	₹ 3,96,039.60
MF 'Z'	= 20,000.00 $\times$ ₹ 10.20	₹ 2,04,000.00
Total		₹ 7,99,068.77

(iii) Total Yield

	Capital Yield	Dividend Yield	Total
MF 'X'	₹ 1,99,029.17 - ₹ 2,00,000 = - ₹ 970.83	₹ 6,000	₹ 5,029.17
MF 'Y'	₹ 3,96,039.60 - ₹ 4,00,000 = - ₹ 3,960.40	Nil	- ₹ 3,960.40
MF 'Z'	₹ 2,04,000 - ₹ 2,00,000 = ₹ 4,000	₹ 5,000	₹ 9,000.00
Total			₹ 10,068.77

$$\text{Total Yield} = \frac{₹ 10,068.77}{₹ 8,00,000} \times 100 = 1.2586\%$$

(iv) No. of Days Investment Held

	MF 'X'	MF 'Y'	MF 'Z'
Let No. of days be	X	Y	Z
Initial Investment (₹)	2,00,000	4,00,000	2,00,000
Yield (₹)	5,029.17	-3,960.40	9,000.00
Yield (%)	2.5146	- 0.9901	4.5
Period of Holding (Days)	$\frac{2.5146}{9.66} \times 365$ = 95 Days	$\frac{-0.9901}{-11.66} \times 365$ = 31 Days	$\frac{4.5}{24.15} \times 365$ = 68 Days

Date of Original Investment 26.12.17 28.02.18 22.01.18

4. (a) No. of the Future Contract to be obtained to get a complete hedge

$$= \frac{10000 \times ₹22 \times 1.5 - 5000 \times ₹40 \times 2}{₹1000}$$
$$= \frac{₹3,30,000 - ₹4,00,000}{₹1000} = 70 \text{ contracts}$$

Thus, by purchasing 70 Nifty future contracts to be long to obtain a complete hedge.

Cash Outlay

$$= 10000 \times ₹22 - 5000 \times ₹40 + 70 \times ₹1,000$$
$$= ₹2,20,000 - ₹2,00,000 + ₹70,000 = ₹90,000$$

Cash Inflow at Close Out

$$= 10000 \times ₹22 \times 0.98 - 5000 \times ₹40 \times 1.03 + 70 \times ₹1,000 \times 0.985$$
$$= ₹2,15,600 - ₹2,06,000 + ₹68,950 = ₹78,550$$

Gain/ Loss

$$= ₹78,550 - ₹90,000 = - ₹11,450 \text{ (Loss)}$$

(b) (i) Average return from the portfolio for the year ended 31.3.2015

Calculation of return on portfolio for 2014-15	(Calculation in ₹ / share)		
	X Ltd.	Y Ltd.	
Dividend received during the year	10	3	
Capital gain/loss by 31.03.15			
Market value by 31.03.15	220	290	
Cost of investment	200	300	
Gain/loss	20	(-)10	
Yield	30	(-)7	
Cost	200	300	
% return	15%	(-)2.33%	
Weight in the portfolio	57	43	
Weighted average return			7.55%

- (ii) Average return from the portfolio for the year ended 2015-16 shall be calculated using the concept of joint probability as follows:

X Ltd.

Path	Income from Dividend (₹)	Gain from Market Price (₹)	Total Yield (₹)	Joint Prob.	Exp. Yield (₹)
1	10	220 – 220 = 0	10	0.20 x 0.20 = 0.04	0.40
2	10	250 – 220 = 30	40	0.20 x 0.50 = 0.10	4.00
3	10	280 – 220 = 60	70	0.20 x 0.30 = 0.06	4.20
4	15	220 – 220 = 0	15	0.30 x 0.20 = 0.06	0.90
5	15	250 – 220 = 30	45	0.30 x 0.50 = 0.15	6.75
6	15	280 – 220 = 60	75	0.30 x 0.30 = 0.09	6.75
7	20	220 – 220 = 0	20	0.50 x 0.20 = 0.10	2.00
8	20	250 – 220 = 30	50	0.50 x 0.50 = 0.25	12.50
9	20	280 – 220 = 60	80	0.50 x 0.30 = 0.15	12.00
Expected Yield (₹)					49.50
Market Value on 01.04.2015 (₹)					220
% Return					22.50

Y Ltd.

Path	Income from Dividend (₹)	Gain from Market Price (₹)	Total Yield (₹)	Joint Prob.	Exp. Yield (₹)
1	1.50	290 – 290 = 0	1.50	0.20 x 0.20 = 0.04	0.06
2	1.50	310 – 290 = 20	21.50	0.20 x 0.50 = 0.10	2.15
3	1.50	330 – 290 = 40	41.50	0.20 x 0.30 = 0.06	2.49
4	2.00	290 – 290 = 0	2.00	0.30 x 0.20 = 0.06	0.12
5	2.00	310 – 290 = 20	22.00	0.30 x 0.50 = 0.15	3.30
6	2.00	330 – 290 = 40	42.00	0.30 x 0.30 = 0.09	3.78
7	3.50	290 – 290 = 0	3.50	0.50 x 0.20 = 0.10	0.35
8	3.50	310 – 290 = 20	23.50	0.50 x 0.50 = 0.25	5.88
9	3.50	330 – 290 = 40	43.50	0.50 x 0.30 = 0.15	6.52
Expected Yield (₹)					24.65
Market Value on 01.04.2015 (₹)					290
% Return					8.50

Weight in portfolio (1,00,000 x 220): (50,000 x 290) 60.30 : 39.70

Weighted average (Expected) return (0.6030 x 22.50 + 0.3970 x 8.50) 16.94%

- (iii) To analyze the risk of each investment we need to calculate the Standard Deviation of each investment as follows:

X Ltd.

Path	Prob. (1)	Yield (₹)	Dev. $(P_X - \overline{P_X})$	Square of dev. (2)	(1) X (2)
1	0.04	10	-39.50	1560.25	62.41

2	0.10	40	-9.50	90.25	9.03
3	0.06	70	20.50	420.25	25.22
4	0.06	15	-34.50	1190.25	71.42
5	0.15	45	-4.50	20.25	3.04
6	0.09	75	25.50	650.25	58.52
7	0.10	20	-29.50	870.25	87.03
8	0.25	50	0.50	0.25	0.06
9	0.15	80	30.50	930.25	139.54
					$\sigma^2_M = 456.27$

Standard Deviation (σ_X)

21.36

Y Ltd.

Path	Prob. (1)	Yield (₹)	Dev. ($P_Y - \bar{P}_Y$)	Square of dev. (2)	(1) X (2)
1	0.04	1.50	-23.15	535.92	21.44
2	0.10	21.50	-3.15	9.92	0.99
3	0.06	41.50	16.85	283.92	17.04
4	0.06	2.00	-22.65	513.02	30.78
5	0.15	22.00	-2.65	7.02	1.05
6	0.09	42.00	17.35	301.02	27.09
7	0.10	3.50	-21.15	447.32	44.73
8	0.25	23.50	-1.15	1.32	0.33
9	0.15	43.50	18.85	355.32	53.30
					$\sigma^2_N = 196.75$

Standard Deviation (σ_Y)

14.03

(iii) Although Expected Return is higher in case of X Ltd. but it also has higher risk due to High S.D.

5. (a) First of all, to calculate Cost of Equity we shall compute the Equity Beta of STR Ltd. as follows:

$$\beta_a = \beta_e \left[\frac{E}{E + D(1-t)} \right]$$

$$1.11 = \beta_e \left[\frac{250}{250 + 80(1-0.30)} \right]$$

$$\beta_e = 1.36$$

then we shall compute the Cost of Equity as per CAPM as follows:

$$\begin{aligned} k_e &= R_f + \beta \times \text{Market Risk Premium} \\ &= 8.5\% + 1.36 \times 9\% \\ &= 8.5\% + 12.24\% = 20.74\% \end{aligned}$$

$$\text{Cost of Debt } (k_d) = 11\% (1 - 0.30) = 7.70\%$$

$$\begin{aligned}
 \text{WACC (} k_o \text{)} &= k_e \times \frac{E}{E+D} + k_d \times \frac{D}{E+D} \\
 &= 20.74 \times \frac{250}{330} + 7.70 \times \frac{80}{330} \\
 &= 15.71 + 1.87 = 17.58\% \\
 \text{Taxable Income} &= ₹ 50 \text{ Crore} / (1 - 0.30) \\
 &= ₹ 7142.86 \text{ lakhs} \\
 \text{Operating Income} &= \text{Taxable Income} + \text{Interest} \\
 &= ₹ 7142.86 \text{ lakhs} + ₹ 880 \text{ lakhs} \\
 &= ₹ 8022.86 \text{ lakhs} \\
 \text{EVA} &= \text{EBIT (1-Tax Rate)} - \text{WACC} \times \text{Invested Capital} \\
 &= ₹ 8022.86 \text{ lakhs} (1 - 0.30) - 17.58\% \times ₹ 330 \text{ Crore} \\
 &= ₹ 5616.00 \text{ lakhs} - ₹ 5801.40 \text{ lakhs} = - ₹ 185.40 \text{ lakhs}
 \end{aligned}$$

- (b) (i) The given swap arrangement is Plain Vanilla Overnight Index Swap (OIS).
(ii) To compute the Net Settlement amount we shall compute Interest as per floating rate as follows:

Day	Principal (₹)	MIBOR (%)	Interest (₹)
Tuesday	10,00,00,000	8.15	22,329
Wednesday	10,00,22,329	7.98	21,868
Thursday	10,00,44,197	7.95	21,790
Friday	10,00,65,987	8.12	22,261
Saturday & Sunday (*)	10,00,88,248	8.15	44,697
Monday	10,01,32,945	7.75	<u>21,261</u>
Total Interest @ Floating Rate (A)			<u>1,54,206</u>
Total Interest @ Fixed Rate (B)			1,53,425
$10,00,00,000 \times 8.00\% \times \frac{7}{365}$			
Net Settlement Amount Paid			781

6. (a) To evaluate which option would be better we shall compute the outflow under each option as follows:

(i) **Pay Immediately availing discount**

Particulars	
Spot Rate	₹ 66.98
Amount required in US\$ [US\$ 8 Million (1 - 0.01)]	US\$ 7.92 Million
Amount required in ₹ [₹ 66.98 x US\$ 7.92 Million]	₹ 53.0482 Crore
Cash Available	₹ 0.2500 Crore
Loan required	₹ 52.7982 Crore
Interest for 90 days @ 9%	₹ 1.1880 Crore
Total Outflow	₹ 53.9862 Crore

(ii) Pay the supplier on 60th day and avail bank's loan (after utilizing cash) for 30 days.

Particulars	
Applicable Forward Rate	₹ 67.16
Amount required in ₹ [₹ 67.16 x US\$ 8 Million]	₹ 53.7280 Crore
Loan required [₹ 53.7280 Crore – ₹ 0.25 Crore]	₹ 53.4780 Crore
Interest for 30 days @ 9%	₹ 0.4011 Crore
	₹ 53.8791 Crore
Interest earned on Cash for 60 days @ 4%	₹ 0.0017 Crore
Total Outflow	₹ 53.8774 Crore

(iii) Avail supplier offer of 90 days credit and utilize cash available

Particulars	
Amount Payable	US\$ 8 Million
Interest for 30 days @ 8%	US\$ 0.0533 Million
Amount required in ₹	US\$ 8.0533 Million
Applicable Forward Rate	₹ 68.03
Amount required in ₹ [₹ 68.03 x US\$ 8.0533 Million]	₹ 54.7866 Crore
Cash Available	₹ 0.2500 Crore
Interest earned on Cash for 90 days @ 4%	₹ 0.0025 Crore
Total Outflow	₹ 54.5341 Crore

Decision: Cash outflow is least in case of Option (ii) same should be opted for.

(b) Sharpe Ratio $S = (R_p - R_f)/\sigma_p$

Treynor Ratio $T = (R_p - R_f)/\beta_p$

Where,

R_p = Return on Fund

R_f = Risk-free rate

σ_p = Standard deviation of Fund

β_p = Beta of Fund

Reward to Variability (Sharpe Ratio)

Mutual Fund	R_p	R_f	$R_p - R_f$	σ_p	Reward to Variability	Ranking
A	15	6	9	7	1.286	2
B	18	6	12	10	1.200	3
C	14	6	8	5	1.600	1
D	12	6	6	6	1.000	5
E	16	6	10	9	1.110	4

Reward to Volatility (Treynor Ratio)

Mutual Fund	R_p	R_f	$R_p - R_f$	β_p	Reward to Volatility	Ranking
A	15	6	9	1.25	7.20	2
B	18	6	12	0.75	16.00	1
C	14	6	8	1.40	5.71	5
D	12	6	6	0.98	6.12	4
E	16	6	10	1.50	6.67	3

7. (a) The various types of problems faced in International Capital Budgeting analysis are as follows:

- (1) Multinational companies investing elsewhere are subjected to foreign exchange risk in the sense that currency appreciates/ depreciates over a span of time. To include foreign exchange risk in the cash flow estimates of any project, it is necessary to forecast the inflation rate in the host country during the lifetime of the project. Adjustments for inflation are made in the cash flows depicted in local currency. The cash flows are converted in parent country's currency at the spot exchange rate multiplied by the expected depreciation rate obtained from purchasing power parity.
- (2) Due to restrictions imposed on transfer of profits, depreciation charges and technical differences exist between project cash flows and cash flows obtained by the parent organization. Such restriction can be diluted by the application of techniques viz internal transfer prices, overhead payments. Adjustment for blocked funds depends on its opportunity cost, a vital issue in capital budgeting process.
- (3) In multinational capital budgeting, after tax cash flows need to be considered for project evaluation. The presence of two tax regimes along with other factors such as remittances to the parent firm in the form of royalties, dividends, management fees etc., tax provisions with held in the host country, presence of tax treaties, tax discrimination pursued by the host country between transfer of realized profits vis-à-vis local re-investment of such profits cause serious impediments to multinational capital budgeting process. MNCs are in a position to reduce overall tax burden through the system of transfer pricing.

For computation of actual after tax cash flows accruing to the parent firm, higher of home/ host country tax rate is used. If the project becomes feasible then it is acceptable under a more favourable tax regime. If not feasible, then, other tax saving aspects need to be incorporated in order to find out whether the project crosses the hurdle rate.

- (b) Sustainable growth is important to enterprise long-term development. Too fast or too slow growth will go against enterprise growth and development, so financial should play important role in enterprise development, adopt suitable financial policy initiative to make sure enterprise growth speed close to sustainable growth ratio and have sustainable healthy development.

The sustainable growth rate (SGR) of a firm is the maximum rate of growth in sales that can be achieved, given the firm's profitability, asset utilization, and desired dividend payout and debt (financial leverage) ratios. The sustainable growth rate is a measure of how much a firm can grow without borrowing more money. After the firm has passed this rate, it must borrow funds from another source to facilitate growth. Variables typically include the net profit margin on new and existing revenues; the asset turnover ratio, which is the ratio of sales revenues to total assets; the assets to beginning of period equity ratio; and the retention rate, which is defined as the fraction of earnings retained in the business.

$$\text{SGR} = \text{ROE} \times (1 - \text{Dividend payment ratio})$$

Sustainable growth models assume that the business wants to:

- (1) maintain a target capital structure without issuing new equity;
- (2) maintain a target dividend payment ratio; and
- (3) increase sales as rapidly as market conditions allow.

- (c) The fundamental differences between an investment bank and a commercial bank can be outlined as follows:

Investment Banks	Commercial Banks
1. Investment Banks help their clients in raising capital by acting as an intermediary between the buyers and the sellers of securities (stocks or bonds)	1. Commercial Banks are engaged in the business of accepting deposits from customers and lending money to individuals and corporate
2. Investment Banks do not take deposits from customers	2. Commercial banks can legally take deposits from customers.
3. The Investment Banks do not own the securities and only act as an intermediary for smooth transaction of buying and selling securities.	3. Commercial Banks own the loans granted to their customers.
4. Investment Banks earn underwriting commission	4. Commercial banks earn interest on loans granted to their customers.

- (d) Following are major types of mergers:

- (i) **Horizontal Merger:** The two companies which have merged are in the same industry, normally the market share of the new consolidated company would be larger and it is possible that it may move closer to being a monopoly or a near monopoly to avoid competition.
- (ii) **Vertical Merger:** This merger happens when two companies that have 'buyer-seller' relationship (or potential buyer-seller relationship) come together.
- (iii) **Conglomerate Mergers:** Such mergers involve firms engaged in unrelated type of business operations. In other words, the business activities of acquirer and the target are neither related to each other horizontally (i.e., producing the same or competing products) nor vertically (having relationship of buyer and supplier). In a pure conglomerate merger, there are no important common factors between the companies in production, marketing, research and development and technology.
- (iv) **Congeneric Merger:** In these mergers, the acquirer and the target companies are related through basic technologies, production processes or markets. The acquired company represents an extension of product-line, market participants or technologies of the acquirer. These mergers represent an outward movement by the acquirer from its current business scenario to other related business activities within the overarching industry structure
- (v) **Reverse Merger:** Such mergers involve acquisition of a public (Shell Company) by a private company, as it helps private company to by-pass lengthy and complex process required to be followed in case it is interested in going public.

- (e) Cross-border leasing is a leasing agreement where lessor and lessee are situated in different countries. This raises significant additional issues relating to tax avoidance and tax shelters. It has been widely used in some European countries, to arbitrage the difference in the tax laws of different countries.

Cross-border leasing have been in practice as a means of financing infrastructure development in emerging nations. Cross-border leasing may have significant applications in financing infrastructure development in emerging nations - such as rail and air transport equipment, telephone and telecommunications, equipment, and assets incorporated into power generation and distribution systems and other projects that have predictable revenue streams.

A major objective of cross-border leases is to reduce the overall cost of financing through utilization by the lessor of tax depreciation allowances to reduce its taxable income. The tax savings are passed through to the lessee as a lower cost of finance. The basic prerequisites are relatively high tax rates in the lessor's country, liberal depreciation rules and either very flexible or very formalistic rules governing tax ownership.