FINAL
GROUP-I PAPER-2
STRATEGIC FINANCIAL
MANAGEMENT

MAY 2019

Roll No. ....

Total No. of Questions – **7**

Total No. of Printed Pages – **12**

Time Allowed – **3** Hours

Maximum Marks – **100**

LKS2

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate who has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

Question No. **1** is compulsory.

Candidates are also required to answer any **five** questions from the remaining **six** questions.

Wherever necessary, suitable assumptions may be made and indicated in the answers by the candidate.

Working notes should form part of the respective answers.

Marks

1. (a) SS Company is considering the replacement of its existing machine with a new machine. The Purchase price of the New Machine is ₹ 26 Lakhs and its expected Life is 8 years. The company follows straight-line method of depreciation on the original investment (scrap value is not considered for the purpose of depreciation). The other expenses to be incurred for the New Machine are as under : **5**

(i) Installation Charges ₹ 9,000

(ii) Fees paid to the consultant for his advice to buy the New Machine ₹ 6,000.

(iii) Additional Working Capital required ₹ 17,000. (will be released after 8 years)

 Marks

The written down value of the existing machine is ₹ 76,000 and its Cash Salvage Value is ₹ 12,500. The dismantling of this machine would cost ₹ 4,500. The Annual Earnings (before tax but after depreciation) from the New Machine would amount to ₹ 3,15,000. Income tax rate is 35%. The Company's required Rate of Return is 13%.

You are required to advise on the viability of the proposal.

PVIF(13%, 8) = 0.376 PVIFA(13%, 8) = 4.80

(b) On April 1, 2019, Kasi has a portfolio consisting of four securities as shown below : **5**

Security	A	K	S	P
Market Price	₹ 48.5	₹ 332.68	₹ 13.99	₹ 292.82
No. of Shares	673	480	721	358
β value	0.74	1.28	0.54	0.46

Cost of Capital is 16% p.a. compounded continuously. Kasi fears a fall in prices of shares in future. Accordingly, he approaches you for the advice to protect the interest of his Portfolio.

You can make use of the following information :

(i) The current NIFTY Value is 9380.

(ii) NIFTY Futures can be traded in units of 25 only.

(iii) Futures for September are currently quoted at 9540 and Futures for October are being quoted at 9820.

You are required to calculate :

(1) The Beta of his Portfolio.

(2) Theoretical Value of Futures for contracts expiring in September & October.

Given ($e^{0.067} = 1.0693$, $e^{0.08} = 1.0833$, $e^{0.093} = 1.0975$)

(3) The number of NIFTY Contract that he would have to sell, if he desires to hedge 150% of the Portfolio until October.

(c) The following particulars relating to Vishnu Fund Scheme : 5

	Particulars	Value ₹ in Crores
1.	Investments in Shares (at cost)	
	a. Pharmaceutical companies	79
	b. Construction Industries	31
	c. Service Sector Companies	56
	d. IT Companies	34
	e. Real Estate Companies	10
2.	Investments in Bonds (Fixed Income)	
	a. Listed Bonds (8000, 14% Bonds of ₹ 15,000 each)	12
	b. Unlisted Bonds	7
3.	No. of Units outstanding (crores)	4.2
4.	Expenses Payable	3.5
5.	Cash and Cash equivalents	1.5
6.	Market expectations on listed bonds	8.842%

Marks

Particulars relating to each sector are as follows :

Sector	Index on Purchase date	Index on Valuation date
Pharmaceutical companies	260	465
Construction Industries	210	450
Service Sector Companies	275	480
IT Companies	240	495
Real Estate Companies	255	410

The fund has incurred the following expenses :

Consultancy and Management fees	₹ 480 Lakhs
Office Expenses	₹ 150 Lakhs
Advertisement Expenses	₹ 38 Lakhs

You are required to calculate the following :

(i) Net Asset Value of the fund

(ii) Net Asset Value per unit

(iii) If the period of consideration is 2 years, and the fund has distributed ₹ 3 per unit per year as cash dividend, ascertain the Net return (Annualized).

(iv) Ascertain the Expenses ratio.

Marks

(d) DSE Ltd. is an export oriented business in Kolkata. DSE Ltd. invoices in customers currency. Its receipts of US $ 3,00,000 is due on July 1st, 2019. **5**

Market information as at April 1st 2019

<table>
<tr><td>Exchange Rates</td><td></td><td colspan="2">Currency Futures</td><td rowspan="5">Contract Size = ₹6,40,000/-</td></tr>
<tr><td>US $/₹</td><td></td><td>US $/₹</td><td></td></tr>
<tr><td>Spot</td><td>0.0154</td><td>April</td><td>0.0155</td></tr>
<tr><td>1 Month Forward</td><td>0.0150</td><td>July</td><td>0.0151</td></tr>
<tr><td>3 Months Forward</td><td>0.0147</td><td></td><td></td></tr>
</table>

<table>
<tr><th colspan="2">Initial Margin</th><th>Interest Rates in India</th></tr>
<tr><td>April</td><td>₹ 13,000</td><td>9%</td></tr>
<tr><td>July</td><td>₹ 24,000</td><td>8.5%</td></tr>
</table>

On July, the spot rate US $/₹ is 0.0146 and currency future rate is 0.0147 Comment which of the following methods would be most advantageous for DSE Ltd.

(i) Using forward contract.

(ii) Using currency futures

(iii) Not hedging currency risks.

It may be assumed that variation in margin would be settled on the maturity of the futures contract.

Marks

2. (a) Equity of KGF Ltd. (KGFL) is ₹ 410 Crores, its debt is worth ₹ 170 Crores. Printer Division segments value is attributable to 74%, which has an Asset Beta (β_P) of 1.45, balance value is applied on Spares and Consumables Division, which has an Asset Beta (β_{sc}) of 1.20 KGFL Debt beta (β_D) is 0.24. **8**

You are required to calculate :

(i) Equity Beta (β_E),

(ii) Ascertain Equity Beta (β_E). If KGF Ltd. decides to change its Debt Equity position by raising further debt and buying back of equity to have its Debt Equity Ratio at 1.90. Assume that the present Debt Beta (β_{D1}) is 0.35 and any further funds raised by way of Debt will have a Beta (β_{D2}) of 0.40.

(iii) Whether the new Equity Beta (β_E) justifies increase in the value of equity on account of leverage ?

(b) The closing price of LX Ltd. is ₹ 24 per share as on 31st March, 2019 on NSE Ltd. The Price Earnings Ratio Was 6. It was found that an amount of ₹ 24 Lakhs as income and an extra ordinary loss of ₹ 9 lakhs were included in the books of accounts. The existing operations except for the extraordinary items are expected to continue in future. Further the company has launched a new product during the year with the following expectations : **8**

	(₹ in Lakhs)
Sales	150
Material Cost	40
Labour Cost	34
Fixed Cost	24

The company has 500,000 equity shares of ₹ 10 each and 100,000 9% Preference Shares of ₹ 100 each. The Price Earnings Ratio is 6 times.

Post tax cost of capital is 10 per cent per annum. Tax rate is 34 per cent.

You are required to determine :

(i) Existing Profit from old operations

(ii) The value of business

3. (a) IM is an American firm having its subsidiary in Japan and JI is a Japanese firm having its subsidiary in USA. They face the following interest rates 8

	IM	JI
USD Floating rate	LIBOR + 0.5%	LIBOR + 2.5%
JPY Fixed rate	4%	4.25%

IM wishes to borrow USD at floating rate and JI JY at fixed rate. The amount required by both the companies is same at the current Exchange Rate. A financial institution requires 75 basis points as commission for arranging Swap. The companies agrees to share the benefit/ loss equally.

You are required to find out

(i) Whether a beneficial swap can be arranged ?

(ii) What rate of interest for both IM and JI ?

Marks

(b) An investor is considering purchasing the equity shares of LX Ltd., whose current market price (CMP) is 150. The company is proposing a dividend of ₹ 6 for the next year. LX is expected to grow @ 18 per cent per annum for the next four years. The growth will decline linearly to 14 per cent per annum after first four years. Thereafter, it will stabilise at 14 per cent per annum infinitely. The required rate of return is 18 per cent per annum. **8**

You are required to determine:

(i) The intrinsic value of one share

(ii) Whether it is worth to purchase the share at this price

t	1	2	3	4	4	5	6	7
PVIF(18,t)	0.847	0.718	0.609	0.516	0.437	0.370	0.314	0.266

4. (a) KGF Bank's Sydney branch has surplus funds of USD $ 7,00,000 for a period of 2 months. Cost of funds to the bank is 6% p.a. They propose to invest these funds in Sydney, New York or Tokyo and obtain the best yield, without any exchange risk to the bank. The Following rates of interest are available at the three centres for investment of domestic funds there for a period of 2 Months. **8**

Sydney -------- 7.5% p.a.

New York -------- 8% p.a.

Tokyo ------- 4% p.a.

 Marks

The market rates in Australia for US Dollars and Yen are as under :

Sydney on New York .

Spot	0.7100/0.7300
1 Month	10/20
2 Months	25/30

Sydney on Tokyo :

Spot	79.0900/79.2000
1 Month	40/30
2 Months	55/50

At which centre, will the investment be made & what will be the net gain to the bank on the invested funds ?

(b) M/s Shanti Lal Ltd. is in the business of manufacturing products. Company decided to install a Machine under considering buying (or) leasing option. The machine is subjected to Straight-Line method of depreciation. M/s Shanti Lal Ltd. can raise a debt at 16% payable in 4 Equal Annual Installments of ₹ 1,68,589 each, at the beginning of the year. In case of leasing, the Company would require to pay an annual Rent at the end of the year @ 30% of Cost of Machine for 4 years. The Company is in 45% Tax bracket. The salvage value is estimated at ₹ 12,412 at the end of the 4 years. **8**

Advise which of the Financing options Shanti Lal Ltd. should exercise and why ?

n	1	2	3	4
PVIF(8.8,n)	0.919	0.845	0.776	0.714
PVIF(16,n)	0.862	0.743	0.640	0.552

Marks

5. (a) Ms Preeti, a school teacher, after retirement has built up a portfolio of ₹ 1,20,000 which is as follow: **8**

Stock	No of shares	Market price per share (₹)	Beta
ABC Ltd.	1000	50	0.9
DEF Ltd.	500	20	1.0
GHI Ltd.	800	25	1.5
JKL Ltd.	200	200	1.2

Her portfolio consultant Sri Vijay has advised her to bring down the beta to 0.8. You are required to compute :

(i) Present portfolio beta

(ii) How much risk free investment should be bought in, to reduce the beta to 0.8 ?

(b) R Ltd. and S Ltd. operating in same industry are not experiencing any rapid growth but providing a steady stream of earnings. R Ltd.'s management is interested in acquisition of S Ltd. due to its excess plant capacity. Share of S Ltd. is trading in market at ₹ 3.20 each. Other data relating to S Ltd. is as follows : **8**

Balance Sheet of S Ltd.

Liabilities	Amount (₹)	Assets	Amount (₹)
Current Liabilities	1,59,80,000	Current Assets	2,48,75,000
Long Term Liabilities	1,28,00,000	Other Assets	94,00,000
Reserves & surplus	2,79,95,000	Property Plants & Equipment	3,45,00,000
Share Capital (80 Lakhs shares of ₹ 1.5 each)	1,20,00,000		
Total	**6,87,75,000**	**Total**	**6,87,75,000**

Marks

Particulars	R Ltd. (₹)	S Ltd. (₹)	Combined Entity (₹)
Profit after Tax	86,50,000	49,72,000	1,21,85,000
Residual Net Cash Flows per year	90,10,000	54,87,000	1,85,00,000
Required return on equity	13.75%	13.05%	12.5%

You are required to compute the following :

(i) Minimum price per share S Ltd. should accept from R Ltd.

(ii) Maximum price per share R Ltd. shall be willing to offer to S Ltd.

(iii) Floor Value of per share of S Ltd., whether it shall play any role in decision for its acquisition by R Ltd.

6. (a) XL Ltd., who is dealing in computer software, is having credit sales of ₹ 2,10,00,000 with average receivables of ₹ 35,00,000. Bad debts are 0.9% on sales. With an eye to save time on collection of receivables XL Ltd. is considering a proposal to appoint a Factor. 8

The following information is available :

Particulars	Recourse	Non-Recourse
Average reduction in collection of receivables (Days)	30	30
Reduction in Bad Debts by	0.3%	0.3%
Saving in Administration cost ₹	40,000	40,000
Advance	80%	80%
Interest on advance	2% p.a. higher than current OD interest of 7 % p.a.	
Factor fee	0.60 %	1.25%

Assume 360 days in a year.

You are required to evaluate the proposal.

Marks

(b) A mutual fund has two schemes i.e. Dividend plan (Plan-A) and Bonus plan (Plan-B). The face value of the unit is ₹ 10. On 01/04/2016 Mr. Anand invested ₹ 5,00,000 each in Plan-A and Plan-B when the NAV was ₹ 46.00 and ₹ 43.50 respectively. Both the Plans matured on 31/03/2019. **8**

Particulars of dividend and bonus declared over the period are as follows :

Date	**Dividend(%)**	**Bonus Ratio**	**Net Asset Value (₹)**	
			Plan-A	**Plan-B**
30-06-2016	15%		46.80	44.00
31-08-2016		1:6	47.20	45.40
31-03-2017	10%		48.00	46.60
17-09-2017		1:8	48.40	47.00
21-11-2017	14%		49.60	47.20
25-02-2018	15%		50.00	47.80
31-03-2018		1:10	50.50	48.80
30-06-2018	12%		51.80	49.00
31-03-2019			52.40	50.00

You are required to calculate the Effective Yield. Per annum in respective of the above two plans.

7. Write short notes on any **four** of the following : **4×4 =16**

(a) Limitations of Credit Rating

(b) Exposure Netting

(c) Explain carve out, and its difference from spin off

(d) Explain briefly Debt/Asset Securitisation, and its process.

(e) What makes an organization sustainable ? State the specific steps.