Final New Syllabus

Roll No. .... **Paper - 2** JAN 2021

Strategic Financial Management

Total No. of Questions – **6** Total No. of Printed Pages – **12**

Time Allowed – **3** Hours Maximum Marks – **100**

JFR

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 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 **four** questions from the remaining **five** questions.

Working notes should form part of the respective answers.

Marks

1. (a) Mr. X is of the opinion that market has recently shown the Weak Form of Market Efficiency. In order to test the validity of his impression he has collected the following data relating to the movement of the SENSEX for the last 20 days. **8**

Days	Open	High	Low	Close
1	33470.94	33513.79	33438.03	33453.99
2	33453.64	33478.11	33427.82	33434.83
3	33414.06	33440.29	33397.65	33431.93
4	33434.94	33446.18	33377.78	33383.41
5	33372.92	33380.27	33352.12	33370.93
6	33375.85	33389.49	33331.42	33340.75
7	33340.89	33340.89	33310.95	33330.98
8	33326.84	33340.91	33306.17	33335.08
9	33307.16	33328.22	33296.43	33301.97
10	33298.64	33318.60	33254.28	33259.03
11	33260.04	33228.85	33241.66	33251.53
12	33255.92	33289.46	33249.46	33285.89
13	33288.86	33535.67	33255.98	33329.28
14	33335.00	33346.21	33276.72	33284.17
15	33293.83	33310.86	33278.54	33298.78
16	33300.02	33337.79	33300.02	33325.38
17	33323.36	33356.34	33322.44	33329.95
18	33322.81	33345.98	33317.44	33319.67
19	33317.51	33321.18	33294.19	33302.32
20	33290.86	33324.96	33279.62	33319.61

You are required :

To test the **Weak Form of Market Efficiency** using Auto-Correlation test, taking time lag of 10 days.

Marks

(b) A proposed foreign investment involves creation of a plant with an annual output of 1 million units. The entire production will be exported at a selling price of USD 10 per unit. At the current rate of exchange dollar cost of local production equals to USD 6 per unit. Dollar is expected to decline by 10% or 15%. The change in local cost of production and probability from the expected current level will be as follows : 8

Decline in value of USD (%)	Reduction in local cost of production (USD/unit)	Probability
0	–	0.4
10	0.30	0.4
15	0.15 Additional reduction	0.2

The plant at the current rate of exchange will have a depreciation of USD 1 million annually. Assume local Tax rate as 30%.

You are required to find out :

(i) Annual Cash Flow After Tax (CFAT) under all the different scenarios of exchange rate.

(ii) Expected value of CFAT assuming no repatriation of profits.

(iii) Viability of the investment proposal assuming an initial investment of USD 25 million on plant and working capital with a required rate of return of 11% on investment and on the basis of CFAT arrived under option (ii). The CFAT will grow @ 3% per annum in perpetuity.

Marks

(c) As a financial strategist you will depend on certain key financial decisions. Discuss. 4

2. (a) On 1st January, 2020, an open ended scheme of mutual fund had outstanding units of 300 lakhs with a NAV of ₹ 20.25. At the end of January 2020, it had issued 5 lakhs units at an opening NAV plus a load of 2%, adjusted for dividend equalisation. At the end of February 2020, it had repurchased 2.5 lakhs units at an opening NAV less 2% exit load adjusted for dividend equalisation. At the end of March 2020, it had distributed 70 per cent of its available income. 8

In respect of January – March quarter, the following additional information is available :

Value appreciation of the portfolio	₹ 460 lakhs
Income for January	₹ 24 lakhs
Income for February	₹ 36 lakhs
Income for March	₹ 47 lakhs

You are required to calculate :

(i) Income available for distribution

(ii) Issue price at the end of January

(iii) Repurchase price at the end of February

(iv) Closing value of Net Assets at the end of March

Marks

(b) X Ltd., an Indian company, is considering a proposal to make an investment of USD 1,65,00,000 in Latin America. The project will have a life of 5 years. The current spot exchange rate is INR/USD 72. All investments and revenues will occur in USD. The USD and INR risk free rates are 8 % and 12 % respectively. The following cash flow is expected form the project. **8**

Year	Cash inflow (USD)
1	30,00,000
2	37,50,000
3	45,00,000
4	60,00,000
5	75,00,000

Assume required rate of return on the project as 14%.

You are required to calculate :

(i) The viability of the project using foreign currency approach.

(ii) What will be the impact if there is a withholding tax of 10% applicable on the project.

(c) "The process of securitisation can be viewed as process of creation of additional financial product of securities in the market backed by collaterals." What are the other features ? Describe. **4**

Marks

3. (a) The price of March Nifty Futures Contract on a particular day was 9170. The minimum trading lot on Nifty Futures is 50. The initial margin is 8% and the maintenance margin is 6%. The index closed at the following levels on next five days : **8**

Day	1	2	3	4	5
Settlement Price (₹)	9380	9520	9100	8960	9140

You are required to calculate :

(i) Mark to market cash flows and daily closing balances on account of

(a) An investor who has taken a long position at 9170

(b) An investor who has taken a short position at 9170

(ii) Net profit/ loss on each of the contracts

(b) M/s. Sky products Ltd., of Mumbai, an exporter of sea foods has submitted a 60 days bill for EUR 5,00,000 drawn under an irrevocable Letter of Credit for negotiation. The company has desired to keep 50% of the bill amount under the Exchange Earners Foreign Currency Account (EEFC). The rates for ₹/USD and USD/EUR in inter-bank market are quoted as follows : **8**

	₹/ USD	**USD/EUR**
Spot	67.8000 – 67.8100	1.0775 – 1.8000
1 month forward	10/11 Paise	0.20/0.25 Cents
2 months forward	21/22 Paise	0.40/0.45 Cents
3 months forward	32/33 Paise	0.70/0.75 Cents

Marks

Transit Period is 20 days. Interest on post shipment credit is 8% p.a.

Exchange Margin is 0.1%. Assume 365 days in a year.

You are required to calculate :

(i) Exchange rate quoted to the company

(ii) Cash inflow to the company

(iii) Interest amount to be paid to bank by the company.

(c) Following are the yields on Zero Coupon Bonds (ZCB) having a face value of ₹ 1,000 : 4

Maturity (Years)	Yield to Maturity (YTM)
1	10%
2	11%
3	12%

Assume that the term structure of interest rate will remain the same.

You are required to

(i) Calculate the implied one year forward rates

(ii) Expected Yield to Maturity and prices of one year and two year Zero Coupon Bonds at the end of the first year.

Marks

4. (a) The following are the financial statements of A Ltd., and B Ltd. for the financial year ended 31st March, 2020. Both the companies are working in the same industry. 12

Balance Sheets (₹)

Particulars	**A Ltd.**	**B Ltd.**
Total Current Assets	15,00,000	12,00,000
Total Net Fixed Assets	12,00,000	6,00,000
Total Assets	**27,00,000**	**18,00,000**
Equity Capital (Face Value ₹ 10)	10,00,000	8,00,000
Retained Earnings	3,00,000	–
14% Long Term Debt	7,00,000	5,00,000
Total Current Liabilities	7,00,000	5,00,000
Total Liabilities	**27,00,000**	**18,00,000**

Income Statement (₹)

Particulars	**A Ltd.**	**B Ltd.**
Net Sales	33,10,000	16,60,000
Gross Profit	6,90,000	3,40,000
Operating Expenses	2,00,000	1,00,000
Interest	98,000	70,000
EBT	3,92,000	1,70,000
Tax @ 30%	1,17,600	51,000
PAT	2,74,400	1,19,000
Additional information :		
Dividend Pay-out Ratio	40%	60%
Market Price per Share	40	15

You are required to calculate :

(i) Earnings Per share (EPS), Profit Earning Ratio (PER), Return on Equity (ROE) and Book Value Per Share (BVPS) for both the firms.

(ii) Estimate future EPS growth rate for both the firms.

(iii) If on acquisition of B Ltd. by A Ltd., intrinsic value of B Ltd., will be ₹ 20 per share, develop range of justifiable Exchange Ratio (ER) that can be offered by A Ltd., to shareholders of B Ltd.

(iv) Based on your analysis in (i) and (ii) whether the negotiated ratio will be close to upper or lower range. Justify.

(v) Post-merger EPS on an ER of 0.4:1. What will be immediate accretion or dilution to EPS to the shareholders of both the firms ?

(vi) Post-Merger MPS on the basis of ER of 0.4 : 1

(b) Shyam buys 10,000 shares of X Ltd., @ ₹ 25 per share and obtains a complete hedge of shorting 400 Nifty at ₹ 1,100 each. He closes out his position at the closing price of the next day when the share of X Ltd., has fallen by 4% and Nifty Future has dropped by 2.5%. 4

What is the overall profit or loss from this set of transaction ?

(c) Venture Capital Funding passes through various stages. Discuss. 4

Marks

5. (a) Ramesh has identified stocks of two companies A and B having good investment potential : **10**

Following data is available for these stocks :

Year	A (Market Price per Share in ₹)	B (Market Price per Share in ₹)
2013	19.60	8.70
2014	18.75	12.80
2015	33.42	16.20
2016	42.64	18.25
2017	43.25	15.60
2018	44.60	13.25
2019	34.75	18.60

You are required to calculate :

(i) The Risk and Return by investing in Stock A and B

(ii) The Risk and Return by investing in a portfolio of these Stocks if he invests in Stock A and B in proportion of 6 : 4.

(iii) The better opportunity for investment

(b) M/s. Roly Ltd. wants to acquire M/s. Poly Ltd. The following is the Balance Sheet of Poly Ltd. as on 31st March, 2020 : **6**

Liabilities	₹	Assets	₹
Equity Capital (₹10 per share)	10,00,000	Cash	20,000
Retained Earnings	3,00,000	Debtors	50,000
12% Debentures	3,00,000	Inventories	2,00,000
Creditors and other liability	3,20,000	Plant & Machinery	16,50,000
Total	**19,20,000**	**Total**	**19,20,000**

Marks

Shareholders of Poly Ltd. will get one share of Roly Ltd. at current Market price of ₹ 20 for every two shares. External liabilities are expected to be settled at a discount of ₹ 20,000. Sundry debtors and Inventories are expected to realise ₹ 2,00,000.

Poly Ltd. will run as an independent unit. Cash Flow After Tax is expected to be ₹ 4,00,000 per annum for next 6 years. Assume the disposal value of the plant after 6 years will be ₹ 1,50,000.

Poly Ltd. requires a return of 14%

n	1	2	3	4	5	6
PVIF(14%, n)	0.877	0.769	0.675	0.592	0.519	0.456

Advise the Board of Directors on the financial feasibility of the Proposal.

(c) Non-bank Financial Sources are becoming popular to finance Start-ups. Discuss. **4**

6. (a) The Balance Sheet of M/s. Sundry Ltd. as on 31-03-2020 is follows : **8**

(₹ in lakhs)

Liabilities	**₹**	**Assets**	**₹**
Share Capital	300	Fixed Assets	600
Reserves	200	Inventory	500
Long Term Loan	400	Receivables	240
Short Term Loan	300	Cash	60
Payables & Provisions	200		
Total	**1400**	**Total**	**1400**

Marks

Sales for the year was ₹ 600 lakhs. The sales are expected to grow by 20% during the year. The profit margin and dividend pay-out ratio are expected to be 4% and 50% respectively.

The company further desires that during the current year Sales to Short Term Loan and Payables and Provision should be in the ratio of 4 : 3. Ratio of fixed assets to Long Term Loans should be 1.5. Debt Equity Ratio should not exceed 1.5.

You are required to determine :

(i) The amount of External Fund Requirement(EFR)

(ii) The amount to be raised from Short Term, Long Term and Equity funds.

(b) XYZ has taken a six-month loan from its foreign collaborator for USD 2 millions. Interest is payable on maturity @ LIBOR plus 1%. The following information is available : 8

Spot Rate	INR/USD	68.5275
6 months Forward rate	INR/USD	68.4575
6 months LIBOR for USD	2%	
6 months LIBOR for INR	6%	

You are required to :

(i) Calculate Rupee requirements if forward cover is taken.

(ii) Advise the company on the forward cover.

What will be your opinion if spot rate of INR/USD is 68.4275 ?

(c) Participants are required for the success of the securitisation process. Discuss their roles. 4

OR

Risks are inherent and integral part of the market. Discuss.