Roll No. ....

Total No. of Questions – 7

FINAL
GROUP-I PAPER-2
STRATEGIC FINANCIAL MANAGEMENT

Total No. of Printed Pages – 11

Time Allowed – 3 Hours

Maximum Marks – 100

DDA

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.

Attempt any **five** out of the remaining **six** Questions.

In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra questions answered shall be ignored.

Wherever appropriate, suitable assumptions may be made and indicated in the answer by the candidate.

Working notes should form part of the answer.

Marks

1. (a) The following are the data on five mutual funds : **5**

Fund	Return	Standard Deviation	Beta
A	15	7	1.25
B	18	10	0.75
C	14	5	1.40
D	12	6	0.98
E	16	9	1.50

You are required to compute Reward to Volatility Ratio and rank these portfolio using :

- Sharpe method and
- Treynor's method

assuming the risk free rate is 6%.

(b) Bright Computers Limited is planning to issue a debenture series with a face value of ₹ 1,000 each for a term of 10 years with the following coupon rates : 5

Years	**Rates**
1-4	8%
5-8	9%
9-10	13%

The current market rate on similar debenture is 15% p.a. The company proposes to price the issue in such a way that a yield of 16% compounded rate of return is received by the investors. The redeemable price of the debenture will be at 10% premium on maturity. What should be the issue price of debenture ?

Pv @ 16% for 1 to 10 years are : .862, .743, .641, .552, .476, .410, .354, .305, .263, .227 respectively.

Marks

(c) Calculate the value of share of Avenger Ltd. from the following information : 5

Equity capital of company	₹ 1,200 crores
Profit of the company	₹ 300 crores
Par value of share	₹ 40 each
Debt ratio of company	25
Long run growth rate of the company	8%
Beta 0.1; risk free interest rate	8.7%
Market returns	10.3%
Change in working capital per share	₹ 4
Depreciation per share	₹ 40
Capital expenditure per share	₹ 48

(d) Fresh Bakery Ltd.'s share price has suddenly started moving both upward and downward on a rumour that the company is going to have a collaboration agreement with a multinational company in bakery business. If the rumour turns to be true, then the stock price will go up but if the rumour turns to be false, then the market price of the share will crash. To protect from this an investor has purchased the following call and put option : 5

(i) One 3 months call with a striking price of ₹ 52 for ₹ 2 premium per share.

(ii) One 3 months put with a striking price of ₹ 50 for ₹ 1 premium per share.

Assuming a lot size of 50 shares, determine the followings :

(1) The investor's position, if the collaboration agreement push the share price to ₹ 53 in 3 months.

(2) The investor's ending position, if the collaboration agreement fails and the price crashes to ₹ 46 in 3 months time.

Marks

2. (a) MNL Ltd. is considering investment in one of three mutually exclusive projects : AB, BC, CD. The company's cost of capital is 15% and the risk-free interest rate is 10%. The income-tax rate for the company is 34%. MNL has gathered the following basic cash flows and risk index data for each project : 10

Projects	AB	BC	CD
Initial Investment	12,00,000	10,00,000	15,00,000
Cash Inflows – Year			
1	5,00,000	5,00,000	4,00,000
2	5,00,000	4,00,000	5,00,000
3	5,00,000	5,00,000	6,00,000
4	5,00,000	3,00,000	10,00,000
Risk Index	1.80	1.00	0.60

Using the Risk Adjusted Discount Rate, determine the risk adjusted NPV for each of the project. Which project should be accepted by the company ?

Marks

(b) Calculate the NAV of a regular income scheme on per unit basis of Red Bull mutual fund from the following information : 6

Particulars	₹ in crores
Listed shares at cost (ex-dividend)	30
Cash in hand	0.75
Bonds & Debentures at cost (ex-interest)	2.30
Of these, bonds not listed & not quoted	1.0
Other fixed interest securities at cost	2.50
Dividend accrued	0.8
Amount payable on shares	8.32
Expenditure accrued	1.00
Value of listed bonds & debentures at NAV date	10

Number of units (₹ 10 face value) 30 lakhs

Current realizable value of fixed income securities of face value of ₹ 100 is 106.50

The listed shares were purchased when index was 7100 and

the Present index is 9000

Unlisted bonds and debentures are at cost. Other fixed interest securities are also at cost.

Marks

3. (a) Hi-tech Software Ltd. (HSL) has a complete "Software Developing Unit" costing ₹ 70 lakhs. It is this type of block of assets that have no book value as at 31st March, 2016 as it entitled to 100% rate of depreciation under Income Tax Act, 1961. The company is facing acute fund crunch as it lacks order from Middle East and was toying with the idea of taking term loan. Eastern Financier (EF), a reputed finance company, gave the idea of "buy & lease back" to tide over the fund crunch. EF agreed to buy the software developing unit at ₹ 50 lakhs and lease it back to HSL for lease rental of ₹ 9 lakhs p.a. for a period of 5 years. HSL decides to put the entire net proceeds in a fixed deposit at a nationalized bank at yearly interest of 8.75% for 5 years to generate cash flow much needed for day to day operation. 8

Central Financier (CF) another financier, gave a proposal of selling a similar software developing unit at ₹ 30 lakhs to HSL and they will buy back after 5 years at a price of ₹ 5 lakhs provided the Annual Maintenance Contract (AMC) @ ₹ 1.50 lakhs per annum is entrusted to them. The new machine is also entitled to 100% rate of depreciation under Income Tax Act, 1961. CF also agreed to buy the existing software developing unit at ₹ 50 lakhs. HSL would utilize the net sale proceeds to finance this machine.

The marginal rate of tax of HSL is 34% and its weighted average cost of capital is 12%.

Which offer HSL should accept ?

Year	1	2	3	4	5
Discounting factor @ 12%	.893	.797	.712	.636	.567

Marks

(b) SAM Ltd. has just paid a dividend of ₹ 2 per share and it is expected to grow @ 6% p.a. After paying dividend, the Board declared to take up a project by retaining the next three annual dividends. It is expected that this project is of same risk as the existing projects. The results of this project will start coming from the 4th year onward from now. The dividends will then be ₹ 2.50 per share and will grow @ 7% p.a. 8

An investor has 1,000 shares in SAM Ltd. and wants a receipt of atleast ₹ 2,000 p.a. from this investment.

Show that the market value of the share is affected by the decision of the Board. Also show as to how the investor can maintain his target receipt from the investment for first 3 years and improved income thereafter, given that the cost of capital of the firm is 8%.

4. (a) XYZ Ltd. paid a dividend of ₹ 2 for the current year. The dividend is expected to grow at 40% for the next 5 years and at 15% per annum thereafter. The return on 182 days T-bills is 11% per annum and the market return is expected to be around 18% with a variance of 24%. The co-variance of XYZ's return with that of the market is 30%. You are required to calculate the required rate of return and intrinsic value of the stock. 8

Marks

(b) Abinash is holding 5,000 shares of Future Group Limited. Presently the rate of dividend being paid by the company is ₹ 5 per share and the share is being sold at ₹ 50 per share in the market. However, several factors are likely to change during the course of the year as indicated below : **8**

	Existing	**Revised**
Risk free rate	12.5%	10%
Market risk premium	6%	4.8%
Expected growth rate	5%	8%
Beta value	1.5	1.25

In view of the above factors whether Abinash should buy, hold or sell the shares ? Narrate the reason for the decision to be taken.

5. (a) Following information is given : **8**

<u>Exchange rate</u> –

Canadian dollar 0.666 per DM (spot)

Canadian Dollar 0.671 per DM (3 months)

<u>Interest rate</u> –

DM 7.5% p.a.

Canadian Dollar – 9.5% p.a.

To take the possible arbitrage gains, what operations would be carried out ?

Marks

(b) ABC Ltd. of UK has exported goods worth Can $ 5,00,000 receivable in 6 months. The exporter wants to hedge the receipt in the forward market. The following information is available : **8**

Spot Exchange Rate	Can $ 2.5/£
Interest Rate in UK	12%
Interest Rate in Canada	15%

The forward rates truly reflect the interest rates differential. Find out the gain/loss to UK exporter if Can $ spot rates (i) declines 2%, (ii) gains 4% or (iii) remains unchanged over next 6 months.

6. (a) Kanpur Shoe Ltd. is having sluggish sales during the last few years resulting in drastic fall in market share and profit. The marketing consultant has drawn out a new marketing strategy that will be valid for next four years. If the new strategy is adopted, it is expected that sales will grow @ 20% per year over the previous year for the coming two years and @ 30% from the third year. Other parameters like gross profit margin, asset turnover ratio, the capital structure and the rate of Income tax @ 30% will remain unchanged. Depreciation would be 10% of the net fixed assets at the beginning of the year. The targeted return of the company is 15%. **8**

The financials of the company for the just concluded financial year 2015-16 are given below :

Income Statement	Amount (₹)
Turnover	2,00,000
Gross margin (20%)	40,000
Admin, selling & distribution exp (10%)	20,000
PBT	20,000
Tax (30%)	6,000
PAT	14,000
Balance Sheet Information	
Fixed Assets	80,000
Current Assets	40,000
Equity share capital	1,20,000

You are required to assess the incremental value that will accrue subsequent to the adoption of the new marketing strategy and advise the Board accordingly.

Pv @ 15% for 1, 2 & 3 years are : 0.870, 0.756, 0.658 respectively.

Marks

(b) The CEO of a company thinks that shareholders always look for EPS. Therefore he considers maximization of EPS as his company's objective. His company's current Net Profits are ₹ 80.00 lakhs and P/E multiple is 10.5. He wants to buy another firm which has current income of ₹ 15.75 lakhs & P/E multiple of 10. **8**

What is the maximum exchange ratio which the CEO should offer so that he could keep EPS at the current level, given that the current market price of both the acquirer and the target company are ₹ 42 and ₹ 105 respectively ?

If the CEO borrows funds at 15% and buys out Target Company by paying cash, how much should he offer to maintain his EPS ? Assume tax rate of 30%.

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

(a) Distinguish between Investment Bank and Commercial Bank.

(b) Horizontal merger and Vertical merger.

(c) Distinguish between Money market and Capital market.

(d) Operations in foreign exchange market are exposed to number of risks.

(e) Interface of financial policy and strategic management.