Roll No. ....

Total No. of Questions – **7**

Total No. of Printed Pages – **12**

Time Allowed – **3** Hours

Maximum Marks – **100**

JAT

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 answers in Hindi, 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.

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 question(s) answered shall be ignored.

Wherever appropriate, 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) A is an investor and having in its Portfolio Shares worth ₹ 1,20,00,000 at current price and Cash ₹ 10,00,000. The Beta (β) of Share Portfolio is 1.4. After four months the price of shares dropped by 1.8%. **5**

You are required to determine :

(i) Current Portfolio Beta and

(ii) Portfolio Beta after four months – if A on current date goes for long position on ₹ 1,30,00,000 Nifty futures.

Show calculations in ₹ lakhs with four decimal points.

Marks

(b) You are requested to find out the approximate dividend payment ratio as to have the Share Price at ₹ 56 by using Walter Model, based on following information available for a Company. 5

	Amount ₹
Net Profit	50 lakhs
Outstanding 10% Preference Shares	80 lakhs
Number of Equity Shares	5 lakhs
Return on Investment	15%
Cost of Capital (after Tax) (k_e)	12%

(c) Rama Chemical is in production Line of Chemicals and considering a proposal of building new plant to produce pesticides. The Present Value (PV) of new proposal is ₹ 150 crores (After considering scrap value at the end of life of project). Since this is a new product market, survey indicates following variation in Present Value (PV) : 5

Condition Favourable in first year	PV will increase 30% from original estimate
Condition sluggish in first year	PV will decrease by 40% from original Figures

In addition Rama Chemical has a option to abandon the project at the end of Year and dispose it at ₹ 100 crores. If risk free rate of interest is 8%, what will be present value of put option ?

Marks

(d) A USA based company is planning to set up a software development unit in India. Software developed at the Indian unit will be bought back by the US parent at a transfer price of US \$ 200 Lakhs. The unit will remain in existence in India for one year; the software is expected to get developed within this time frame. 5

The US based company will be subject to corporate tax of 30% and a withholding tax of 10% in India and will not be eligible for tax credit in the US. The software developed will be sold in the US market for US \$ 240 lakhs. Other estimates are as follows :

Rent for fully furnished unit with necessary hardware in India	₹ 20,00,000
Man power cost (160 software professional will be working for 10 hours each day)	₹ 600 per man hour
Administrative and other costs	₹ 24,00,000

Advise the US Company on the financial viability of the project. The rupee-dollar rate is ₹ 67/\$. Assume 1 year = 360 days.

2. (a) Bank A enter into a Repo for 14 days with Bank B in 10% Government of India Bonds 2018 @ 5.65 % for ₹ 8 crore. Assuming that clean price be ₹ 99.42 and initial Margin be 2% and days of accrued interest be 262 days. You are required to determine 4

(i) Dirty Price

(ii) Repayment at maturity. (consider 360 days in a year)

Marks

(b) A Stock costing ₹ 150 pays no dividends. The possible prices at which the stock may be sold for at the end of the year with the respective probabilities are : 8

Price ↓ (in ₹)	Probability ↓
130	0.2
150	0.1
160	0.1
165	0.3
175	0.1
180	0.2
Total	1.0

You are required to :

(i) calculate the Expected Return,

(ii) calculate the Standard Deviation (σ) of Returns.

Show calculations upto three decimal points.

(c) RC Ltd. is able to issue commercial paper of ₹ 50,00,000 every 4 months at a rate of 15% p.a. The cost of placement of commercial paper issue is ₹ 2,000 per issue. RC Ltd. is required to maintain line of credit ₹ 2,00,000 in bank balance. The applicable income tax rate for RC Ltd. is 30%. What is the cost of funds (after taxes) to RC Ltd. for commercial paper issue ? The maturity of commercial paper is four months. 4

Marks

3. (a) SD Ltd. wants to purchase a machine worth ₹ 25,00,000. It has two options : **8**

either (i) to acquire the Asset by taking a Bank Loan @ 12% p.a. repayable in 5 yearly instalments of ₹ 5,00,000 each plus interest or,

(ii) to lease the Asset at yearly rental of ₹ 7,00,000 for five years.

In both the cases, the instalment is payable at the end of the year.

The Company discounts its Cash Flows @ 14% (after tax).

Depreciation is to be taken at 20% on Written Down Value method (WDV).

The Company's tax rate is 34%.

You are required to advise which of the financing options is to be exercised and reason thereof.

Year	1	2	3	4	5	
Present Value Factor (PVF) 14%	0.877	0.769	0.675	0.592	0.519	**(Total 3.432)**

Show Amount to the nearest Rupee.

(b) P Ltd. has current earnings of ₹ 6 per share with 10,00,000 shares outstanding. The company plans to issue 80,000, 8% convertible preference shares of ₹ 100 each at par. The preference shares are convertible into 2 equity shares for each preference share held. The equity share has a current market price of ₹ 42 per share. Calculate : **8**

(i) What is preference share's conversion value ?

Marks

(ii) What is conversion premium ?

(iii) Assuming that total earnings remain the same, calculate the effect of the issue on the basic earning per share (A) before conversion (B) after conversion.

(iv) If profits after tax increases by ₹ 20 Lakhs what will be the basic EPS, (A) before conversion and (B) on a fully diluted basis ?

4. (a) The following information are available with respect of Krishna Ltd. 8

Year	Krishna Ltd. Average share price	Dividend per Share	Average Market Index	Dividend Yield	Return on Govt. bonds
	₹	₹			
2012	245	20	2013	4%	7%
2013	253	22	2130	5%	6%
2014	310	25	2350	6%	6%
2015	330	30	2580	7%	6%

Compute Beta Value of the Krishna Ltd. at the end of 2015 and state your observation.

(b) AC Co. Ltd. has a turnover of ₹ 1600 Lakhs and is expecting growth of 17.90% for the next year. Average credit period is 100 days. The Bad Debt losses are about 1.50% on sales. The administrative cost for collecting receivables is ₹ 8,00,000. The AC Co. Ltd. decides to make use of Factoring Services by FS Ltd. on terms as under : 8

(i) that the factor will charge commission of 1.75%.

(ii) 15% Risk with recourse and

Marks

(iii) Pay an advance on receivables to AC Co. Ltd. at 14% p.a. interest after withholding 10% as reserve.

You are required to calculate the effective cost of factoring to AC Co. Ltd. for the year.

Assume 360 days in a year.

Show amount in Lakhs of ₹ with two decimal points.

5. (a) The five portfolios of a mutual fund experienced following result during last 10 years periods : **8**

Portfolio	Average annual return %	Standard deviation	Correlation with the market return
A	20.0	2.3	0.8869
B	17.0	1.8	0.6667
C	18.0	1.6	0.600
D	16.0	1.8	0.867
E	13.5	1.9	0.5437

Market risk : 1.2

Market rate of return : 14.3%

Risk free rate : 10.1%

Beta may be calculated only upto two decimal. Rank the portfolio using JENSEN'S ALPHA method.

Marks

(b) The following is the Balance Sheet of XYZ Ltd. as at 31st March, 2016 : **8**

Liabilities	₹ in lakhs	Assets	₹ in lakhs
Equity Shares of ₹ 10 each	500	Land and Buildings	150
11% Preference Shares of ₹ 10 each	100	Plant and Machinery	200
		Furniture and Fixtures	60
12% Debentures	100	Inventory	60
Debenture Interest accrued and Payable	12	Sundry Debtors	50
		Cash at Bank	50
Loan from Bank	60	Preliminary Expenses	15
Trade Creditors	300	Cost of issue of Debentures	7
		Profit and Loss Account	480
	1,072		**1,072**

The Company's performance is not good and has suffered sizable losses during the last few years. The Company can be nursed back to health with proper financial restructuring. As such, the following scheme is prepared :

(i) Equity Shares are to be reduced to ₹ 2 per Share, fully paid-up.

Marks

(ii) Preference Shares are to be reduced (with coupon Rate of 9%) to equal number of Shares of ₹ 5 each, fully paid-up.

(iii) Debenture holders have agreed to forgo the accrued interest due to them and for the future the rate of interest on Debentures to be 10%.

(iv) Trade Creditors will forgo 20% of the amount due to them.

(v) The Company to issue 50 Lakh Shares at ₹ 2 each to be paid fully on Application. The entire amount is fully subscribed by Promoters.

(vi) Land and Building to be revalued at ₹ 350 Lakhs, Plant and Machinery value to be taken at ₹ 150 Lakhs and a provision of ₹ 5 Lakhs to be made for Bad and Doubtful Debts.

You are required to :

(1) show the impact of Financial Restructuring on the Company's activities.

(2) prepare the fresh Balance Sheet after the reconstruction is completed on the basis of above proposals.

Marks

6. (a) An importer requested his bank to extend for Forward contract of US $ 25,000 which is due for maturity on 31-10-2015 for a further periods of six month. The other details are as under : 6

Contract rate US $ 1 = ₹ 61.00.

The US $ quoted on 31-10-2015

Spot : ₹ 60.3200/60.6300

Six month premium : 0.86%/0.98%

Margin money for buying and selling rate are 0.086% and 0.15% respectively

Compute

(1) Cost to importer in respect to extension of forward contract.

(2) New Forward contract rate.

(b) XML Bank was established in 2001 and doing banking business in India. The bank is facing very critical situation. There are problems of Gross NPA (Non-Performing Assets) at 40% & CAR/CRAR (Capital Adequacy Ratio/Capital Risk Weight Asset Ratio) at 2%. The net worth of the bank is not good. Shares are not traded regularly. Last week, it was traded @ ₹ 4 per share. 10

RBI Audit suggested that bank has either to liquidate or to merge with other bank.

ZML Bank is professionally managed bank with low gross NPA of 5%. It has net NPA as 0% and CAR at 16%. Its share is quoted in the market @ ₹ 64 per share. The Board of Directors of ZML Bank has submitted a proposal to RBI for takeover of bank XML on the basis of share exchange ratio.

The Balance Sheet details of both the banks are as follows :

PARTICULARS	XML Bank (₹) (Amount in Crores)	ZML BANK (₹) (Amount in Crores)
Liabilities		
Paid up share capital (₹ 10)	70	250
Reserve and Surplus	35	2,750
Deposits	2,000	20,000
Other Liabilities	445	1,250
Total Liabilities	**2,550**	**24,250**
Assets		
Cash in hand and with RBI	200	1,250
Balance with other banks	0	1,000
Investments	550	7,500
Advances	1,750	13,500
Other Assets	50	1,000
Total Assets	**2,550**	**24,250**

It was decided to issue shares at Book Value of ZML Bank to the shareholders of XML Bank. All Assets & Liabilities are to be taken over at Book Value.

Marks

For the Swap Ratio, weights assigned to different parameters are as follows :

Gross NPA	40%
CAR	10%
Market Price	40%
Book Value	10%

You are required to :

(i) Calculate swap ratio based on above rates.

(ii) Calculate number of shares are to be issued.

(iii) Prepare Balance Sheet after Merger.

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

(a) What makes an organisation financially sustainable ?

(b) Distinguish between Cash and Derivative Market.

(c) Briefly explain the main strategies for exposure management.

(d) What is simulation analysis and how it is beneficial ?

(e) What is commercial meaning of synergy and how it used as a tool when deciding Merger and Acquisitions ?