

 <b>XLRI Jamshedpur</b> <i>School of Business &amp; Human Resources</i>		<b>BM (Set A)</b>	
<b>End Term Examination</b>			
<b>Financial Management-II</b>			
<b>Weightage</b>	<b>40%</b>	<b>Duration</b>	<b>120 minutes</b>

Name \_\_\_\_\_

Roll No. \_\_\_\_\_

**INSTRUCTIONS**

- 1. Answer all questions. Fill all answers on the answer sheet provided.**
- 2. Students cannot use laptop.**
- 3. Students cannot bring their mobiles inside exam room.**

You are not allowed to borrow book, paper, calculators, etc.

Anyone who resorts to unfair practices, as judged by the examiner, the minimum penalty will be zero in this segment of evaluation, while the maximum penalty could be expulsion from the institute. There will be no further warnings.

**[Each Correct answer + 1.0 marks; Wrong answer/No Attempt – 0.25 marks]**

1. Emerging trends resulting from the agency problem are all of the following EXCEPT
  - A. large private companies.
  - B. restructuring through leveraged buyouts.
  - C. management by active investors.
  - D. prohibiting managers from maintaining an ownership interest.

**Table 1**

You are going to invest Rs.20,000 in a portfolio consisting of assets X, Y, and Z, as follows:

Asset	Annual Return	Probability	Beta	Proportion
X	10%	0.50	1.2	0.333
Y	8%	0.25	1.6	0.333
Z	16%	0.25	2.0	0.333

2. Given the information in Table 1, what is the expected annual return of this portfolio?
  - A. 11.4%
  - B. 10.0%
  - C. 11.0%
  - D. 11.7%
  
3. The beta of the portfolio in Table 1, containing assets X, Y, and Z, is
  - A. 1.5.
  - B. 2.4.
  - C. 1.6.
  - D. 2.0.
  
4. The beta of the portfolio in Table 1 indicates this portfolio
  - A. has more risk than the market.
  - B. has less risk than the market.
  - C. has an undetermined amount of risk compared to the market.
  - D. has the same risk as the market
  
5. A firm has experienced a constant annual rate of dividend growth of 9 percent on its equity share and expects the dividend per share in the coming year to be Rs.2.70. The firm can earn 12 percent on similar risk involvements. The value of the firm's equity share is \_\_\_\_\_.
  - A. Rs.22.50/share
  - B. Rs.9/share
  - C. Rs.90/share
  - D. Rs.30/share
  
6. According to the efficient market theory,
  - A. prices of actively traded stocks can be under- or over-valued in an efficient market, and bear searching out.
  - B. prices of actively traded stocks can only be under-valued in an efficient market.
  - C. prices of actively traded stocks do not differ from their true values in an efficient market.
  - D. prices of actively traded stocks can only be over-valued in an efficient market.
  
7. \_\_\_\_\_ in the beta coefficient normally causes \_\_\_\_\_ in the required return and therefore \_\_\_\_\_ in the price of the stock, all else remaining the same.
  - A. an increase; an increase; an increase
  - B. an increase; a decrease; an increase
  - C. an increase; an increase; a decrease
  - D. a decrease; a decrease; a decrease
  
8. If expected return is less than required return on an asset, rational investors will
  - A. buy the asset, which will drive the price up and cause expected return to reach the level of the required return.
  - B. sell the asset, which will drive the price down and cause the expected return to reach the level of the required return.
  - C. sell the asset, which will drive the price up and cause the expected return to reach the level of the required return.
  - D. buy the asset, since price is expected to increase.
  
9. A firm has equity share with a market price of Rs.100 per share and an expected dividend of Rs.5.61 per share at the end of the coming year. A new issue of stock is expected to be sold for Rs.98, with Rs.2 per share representing the underpricing necessary in the competitive capital market. Flotation costs are expected to total Rs.1 per share. The dividends paid on the

outstanding stock over the past five years are as follows:

Year	Dividend
1.	Rs. 4.00
2.	4.28
3.	4.58
4.	4.90
5.	5.24

The cost of this new issue of equity shares is

- A. 5.8 percent.
  - B. 7.7 percent.
  - C. 10.8 percent.
  - D. 12.8 percent.
10. In comparing the constant growth model and the capital asset pricing model (CAPM) to calculate the cost of equity,
- A. the constant growth model ignores risk, while the CAPM directly considers risk as reflected in the beta.
  - B. the CAPM directly considers risk as reflected in the beta, while the constant growth model uses the market price as a reflection of the expected risk-return preference of investors.
  - C. the CAPM directly considers risk as reflected in the beta, while the constant growth model uses dividend expectations as a reflection of risk.
  - D. the CAPM indirectly considers risk as reflected in the market return, while the constant growth model uses dividend expectations as a reflection of risk.

**Table 1**

A firm has determined its optimal structure which is composed of the following sources and target market value proportions.

Source of capital	Target market Proportions
Long-term debt	60%
Equity Share	40

**DEBT:** The firm can sell a 15-year, Rs.1,000 par value, 8 percent bond for Rs.1,050. A flotation cost of 2 percent of the face value would be required in addition to the premium of Rs.50.

**EQUITY SHARES:** A firm's equity share is currently selling for Rs.75 per share. The dividend expected to be paid at the end of the coming year is Rs.5. Its dividend payments have been growing at a constant rate for the last five years. Five years ago, the dividend was Rs.3.10. It is expected that to sell, a new equity share issue must be underpriced Rs.2 per share and the firm must pay Rs.1 per share in flotation costs. Additionally, the firm has a marginal tax rate of 40 percent.

11. The firm's cost of a new issue of equity share is (See Table 1.)
  - A. 10.2 percent.
  - B. 14.3 percent.
  - C. 16.7 percent.
  - D. 17.0 percent.
  
12. The firm's cost of retained earnings is (See Table 1.)
  - A. 10.2 percent.
  - B. 14.3 percent.
  - C. 16.7 percent.
  - D. 17.0 percent.
  
13. The weighted average cost of capital up to the point when retained earnings are exhausted is (See Table 1.)
  - A. 6.8 percent.
  - B. 7.7 percent.
  - C. 9.44 percent.
  - D. 11.29 percent.
  
14. Assuming the firm plans to pay out all of its earnings as dividends, the weighted average cost of capital is (See Table 1.)
  - A. 9.6 percent.
  - B. 10.9 percent.
  - C. 11.6 percent.
  - D. 12.1 percent.

**Table 2**

A financial manager at General Talc Mines has gathered the financial data essential to prepare a pro forma balance sheet for cash and profit planning purposes for the coming year ended December 31, 2000. Using the percent-of-sales method and the following financial data, prepare the pro forma balance sheet in order to answer the following multiple choice questions.

- The firm estimates sales of Rs.1,000,000.
- The firm maintains a cash balance of Rs.25,000.
- Accounts receivable represents 15 percent of sales.
- Inventory represents 35 percent of sales.
- A new piece of mining equipment costing Rs.150,000 will be purchased in 2000. Total depreciation for 2000 will be Rs.75,000.
- Accounts payable represents 10 percent of sales.
- There will be no change in notes payable, accruals, and equity.
- The firm plans to retire a long term note of Rs.100,000.
- Dividends of Rs.45,000 will be paid in 2000.
- The firm predicts a 4 percent net profit margin.

Balance Sheet  
General Talc Mines  
December 31, 1999

Assets

Cash	Rs. 25,000
Accounts receivable	120,000

Inventories	300,000
	-----
Total current assets	Rs. 445,000
Net fixed assets	Rs. 500,000
	-----
Total assets	Rs. 945,000
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Liabilities and stockholders' equity	
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Accounts payable	Rs. 80,000
Notes payable	350,000
Accruals	50,000
	-----
Total current liabilities	Rs. 480,000
Long-term debts	150,000
	-----
Total liabilities	Rs. 630,000
Stockholders' equity	
Equity Shares	Rs. 180,000
Retained earnings	135,000
	-----
Total Stockholders' equity	Rs. 315,000
	-----
Total liabilities and stockholders' equity	Rs. 945,000

15. The pro forma total current assets amount is (See Table 2.)
- Rs.470,900.
  - Rs.500,000.
  - Rs.525,000.
  - Rs.575,000.
16. The pro forma net fixed assets amount is (See Table 2)
- Rs.500,000.
  - Rs.575,000.
  - Rs.600,000.
  - Rs.650,000.
17. The pro forma current liabilities amount is (See Table 2.)
- Rs.400,000.
  - Rs.450,000.
  - Rs.475,000.
  - Rs.500,000.
18. The pro forma total liabilities amount is (See Table 2.)
- Rs.500,000.
  - Rs.550,000.
  - Rs.700,000.
  - Rs.650,000.
19. The pro forma accumulated retained earnings amount is (See Table 2.)
- Rs.90,000.
  - Rs.175,000.

- C. Rs.140,000.
  - D. Rs.130,000.
20. The external financing required in 2000 will be (See Table 2.)
- A. Rs.230,000.
  - B. Rs.240,000.
  - C. Rs.0.
  - D. Rs.195,000.
21. General Talc Mines may prepare to (See Table 2.)
- A. arrange for a loan equal to the external funds requirement.
  - B. eliminate the dividend to cover the needed financing.
  - C. cancel the retirement of the long term note to cover the needed financing.
  - D. repurchase equity shares equal to the external funds requirement.
22. The external funds requirement results primarily from (See Table 2.)
- A. the payment of dividends.
  - B. the retirement of debt and purchase of new fixed assets.
  - C. low profit margin.
  - D. high cost of sales.
23. If General Talc Mines cannot raise the external financing required through traditional credit channels, the firm may (See Table 2.)
- A. increase sales.
  - B. purchase additional fixed assets to raise productivity.
  - C. sell equity shares.
  - D. factor accounts receivable.
24. A firm has a line of credit and borrows Rs.25,000 at 9 percent interest for 180 days or half a year. What is the effective rate of interest on this loan if the interest is paid in advance?
- A. 4.7 percent
  - B. 9.4 percent
  - C. 9.9 percent
  - D. 10.3 percent
25. A \_\_\_\_\_ is an agreement between a commercial bank and a business that states the maximum amount of unsecured short-term borrowing the bank will make available to the firm over a given period of time, provided sufficient funds are available.
- A. revolving credit agreement
  - B. line of credit
  - C. short-term self-liquidating loan
  - D. single payment note
26. XYZ Limited borrowed Rs.100,000 for six months from the bank. The rate is prime plus 2 percent. The prime rate was 8.5 percent at the beginning of the loan and changed to 9 percent after two months. This was the only change. How much interest must XYZ Limited pay?
- A. Rs.2,476
  - B. Rs.5,417
  - C. Rs.18,212
  - D. Rs.21,500

27. The cost of giving up a cash discount under the terms of sale 5/20 net 120 (assume a 360-day year) is
- A. 15 percent.
  - B. 18.9 percent.
  - C. 15.8 percent.
  - D. 20 percent.
28. A firm may have a negative cash conversion cycle if it
- A. carries very little inventory and sells its products on credit.
  - B. carries high inventory and sells its products on credit.
  - C. carries very little inventory and sells its products for cash.
  - D. carries high inventory and sells its products for cash.
29. A firm has annual operating outlays of Rs.1,800,000 and a cash conversion cycle of 60 days. If the firm currently pays 12 percent for negotiated financing and reduces its cash conversion cycle to 50 days, the annual savings is
- A. Rs. 50,000
  - B. Rs.200,000
  - C. Rs. 6,000.
  - D. Rs.216,000.
30. A firm is considering relaxing credit standards which will result in an increase in annual sales from Rs.3 million to Rs.3.75 million, a decrease in the cost of annual sales from Rs.2,225,000 to Rs.2,000,000, an increase in additional profit contribution from sales of Rs.10,000, and an increase in the average collection period of 15 days, from 20 to 35 days. The bad debt loss is expected to increase from 1 percent to 1.5 percent of sales. The firm's required return on investments is 15 percent. The net result of the firm relaxing its credit standards is
- A. Rs.10,000.
  - B. -Rs.16,250.
  - C. -Rs.26,875.
  - D. -Rs.16,875.

**Table 3**

A breakdown of Teffan, Ltd.'s outstanding accounts receivable dated June 30, 2000 on the basis of the month in which the credit sale was initially made follows. The firm extends 30-day credit terms.

Month of Credit Sale	Accounts Receivable
-----	
June, 2000	Rs. 410,000
May, 2000	340,000
April, 2000	270,000
March, 2000	200,000
February, 2000 or before	100,000
 Total	 <u>Rs.1,320,000</u>

31. Accounts receivable over 90 days total (See Table 3.)
- Rs.200,000.
  - Rs.470,000.
  - Rs.300,000.
  - Rs.100,000.
32. An evaluation of the firm's collection efforts based on the aging schedule would suggest (See Table 3.)
- poor credit management.
  - satisfactory credit management.
  - superior credit management.
  - overzealous collection efforts.
33. The disposition of the financial manager, marketing manager, and manufacturing manager toward inventory levels is to keep them \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_, respectively.
- high; low; high
  - low; high; low
  - low; high; high
  - high; low; low

34. Maxi, Ltd. is evaluating the acquisition of Mini, Ltd., which had a loss carryforward of Rs.2.75 million which resulted from earlier operations. Maxi can purchase Mini for Rs.3.5 million and liquidate the assets for Rs.1.25 million. Maxi expects earnings before taxes in the three years following the acquisition to be as follows:

Year	Earnings before taxes
1.	Rs.800,000
2.	850,000
3.	900,000

(These earnings are assumed to fall within the limit legally allowed for application of a tax loss carryforward resulting from the proposed acquisition.) Maxi has a 40 percent tax rate and a cost of capital of 10 percent. The total present value of tax advantage of the acquisition in the following three years is

- Rs.440,000.
  - Rs.842,000.
  - Rs.1.1 million.
  - Rs.2.75 million.
35. Marketing Concepts, Ltd. is considering the acquisition of Management Theories, Ltd. at a cash price of Rs.1.5 million. Management Theories, Ltd. has short-term liabilities of Rs.500,000. As a result of acquiring Management Theories, Ltd., Marketing Concepts, Ltd. would acquire the copyrights to a national best-seller which would provide an estimated cash flow of Rs.300,000 for the next five years. The firm has a cost of capital of 20 percent. The approximate net present value of this acquisition is
- Rs.500,000.
  - Rs.480,800.
  - Rs.102,700.
  - Rs.1,102,700.
36. The actual ratio of exchange in a stock-exchange acquisition is the ratio of the
- amount paid per share of the target company to the per share book value of the



- acquiring firm.
  - B. book value per share of the target company to the per share market price of the acquiring firm.
  - C. market value per share of the target company to the per share market price of the acquiring firm.
  - D. amount paid per share of the target company to the per share market price of the acquiring firm.
37. In capital budgeting for a multinational, the starting discount rate to which risks stemming from foreign exchange and political factors can be added, and from which benefits reflecting the parent's lower capital costs may be subtracted is
- A. the cost of capital of the parent (multinational) company
  - B. the risk-free rate of the parent company, adjusted for risk relevant to the foreign subsidiary.
  - C. the local cost of equity capital applicable to the local business and financial environments within which a subsidiary operates.
  - D. the weighted average cost of capital applicable to all foreign subsidiaries combined.
38. A bank lends a firm Rs.500,000 for one year at 8 percent and requires compensating balances of 10 percent of the face value of the loan. The effective annual interest rate associated with this loan is
- A. 8.9 percent.
  - B. 8 percent.
  - C. 7.2 percent.
  - D. 7.0 percent

**Table 4**

The financial analyst for Sportif, Ltd. has compiled sales and disbursement estimates for the coming months of January through May. Historically, 75 percent of sales are for cash with the remaining 25 percent collected in the following month. The ending cash balance in January is Rs.3,000. Prepare a cash budget for the months of February through May to answer the following multiple choice questions.

Month	Sportif, Ltd. Sales	Disbursements
January	Rs. 5,000	Rs.6,000
February	6,000	Rs.7,000
March	10,000	Rs.4,000
April	10,000	Rs.5,000
May	10,000	Rs.5,000

39. The firm has a negative net cash flow in the month(s) of (See Table 4.)
- A. January, February, and March.
  - B. February and March.
  - C. January and February.
  - D. February.
40. The ending cash balance for March is (See Table 4.)
- A. Rs. 250.
  - B. Rs.6,750.
  - C. Rs.2,500.
  - D. Rs. 500.

41. The ending cash balance for February is (See Table 4.)
- A. Rs. 750.
  - B. Rs.1,750.
  - C. Rs.2,500.
  - D. -Rs.1,000.
42. At the end of May, the firm has an ending cash balance of (See Table 4.)
- A. Rs.9,000.
  - B. Rs.16,750.
  - C. Rs.14,250.
  - D. Rs.12,000.
43. The firm has a total financing requirement of \_\_\_\_\_ for the period from February through May. (See Table 4.)
- A. Rs. 0
  - B. Rs.1,750
  - C. Rs.1,250
  - D. Rs. 750
44. If a pro forma balance sheet dated at the end of May was prepared from the information presented, the accounts receivable would total (See Table 4.)
- A. Rs.2,500.
  - B. Rs.7,500.
  - C. Rs.10,000.
  - D. Rs.1,750.
45. The current price of DEF Limited stock is Rs.26.50 per share. Earnings next year should be Rs.2 per share and it should pay a Rs.1 dividend. The P/E multiple is 15 times on average. What price would you expect for DEF's stock in the future?
- A. Rs.13.50
  - B. Rs.15.00
  - C. Rs.26.50
  - D. Rs.30.00
46. All of the following are true of calls and puts EXCEPT
- A. the presence of options trading in the firm's stock could, by increasing trading activity, stabilize the firm's share price in the marketplace.
  - B. options are not a source of funding to the companies.
  - C. options are issued by businesses
  - D. the financial manager of a company has very little need to deal with options.

**Answer question 47-48 referring the paragraph below.**

Treadmill Trucking Company is negotiating a lease for 5 new tractors/trailer rigs with International Leasing. Treadmill has received its best offer from Better Bilt Trucks for a total price of Rs.900,000. The terms of the lease offered by International Leasing called for 4 payments of Rs.260,000, with each payment occurring at the beginning of each year. As an alternative to leasing, the firm can borrow from a large insurance company and buy the trucks. The Rs.900,000 would be borrowed on an amortized term loan at a 10% interest rate for 4 years. Assume the trucks fall into the MACRS 3 year class and have an expected residual value of Rs.100,000. Maintenance costs would be included in the lease. If the trucks are owned, a maintenance contract would be purchased at the beginning of each year for Rs.10,000 per year. Treadmill plans to buy a new fleet of trucks at the end of the 4<sup>th</sup> year. Treadmill Trucking has an

effective marginal tax rate of 20%.

47. What is Treadmill's present value of the cost of owning?
- A. Rs.715,225
  - B. Rs.710,354
  - C. Rs.707,189
  - D. Rs.714,675
48. What is Treadmill's present value of the cost of leasing?
- A. Rs.702,468
  - B. Rs.705,265
  - C. Rs.744,036
  - D. Rs.729,668

**Answer question 49-50 referring the paragraph below.**

Central Food Brokers is considering issuing a 20 year convertible bond that will be priced at its par value of Rs.1,000 per bond. The bonds have a 12 % annual coupon interest rate, and each bond could be converted into 40 shares of equity.

49. What is the conversion price?
- A. Rs.20
  - B. Rs.25
  - C. Rs.33
  - D. Rs.50
50. If Central Food Brokers' bond's conversion price was Rs.20, what would its conversion ratio be?
- A. 20
  - B. 25
  - C. 33
  - D. 50
51. Insurance leads to reduction
- A. in the amount of losses as to whether or not the event will occur (of the population)
  - B. in the probability of occurrence as to whether or not the event will occur (of the population)
  - C. of the uncertainty as to whether or not the event will occur
  - D. in the cost and risk of a loss as it can be shared by others (or even gets transferred)
52. If group wants 95% confidence in its claims paying ability (i.e., actual losses are within two standard deviations of the expected loss) then the insurance costs would be equal to
- A. Losses expected – 2\*(SD of losses)
  - B. plus administrative/operating expenses, adverse selection, moral hazard, capital, and investment performance
  - C. Both (a) and (b)
  - D. Can't say
53. In a discussion on financial futures market, which one would you not agree to:
- A. Change in Open Interest refers to the number of contracts outstanding for a particular delivery month.
  - B. Open interest is a good proxy for the demand for a contract.
  - C. Open interest can be referred to indicate the depth of the market.

- D. The breadth of the market would be how many different contracts (expiry month) are outstanding.
54. In a discussion on Swaps, which one would you not agree:
- A. Credit Risk is the major risk faced by a swap dealer—the risk that a counter party will default on its end of the swap.
  - B. Mismatch Risk is hard to find a counterparty that wants to borrow the right amount of money for the right amount of time.
  - C. Sovereign Risk is the risk that a country will impose exchange rate restrictions that will interfere with performance on the swap.
  - D. None of the above
55. In a discussion on Swaps, which one would you not agree to on behalf of a swap bank:
- A. Interest rate risk refers to Interest rates moving against the swap bank after it has only gotten half of a swap on the books, or if it has an unhedged position.
  - B. Basis Risk refers to If the floating rates of the two counterparties are pegged to the same index
  - C. Exchange Rate Risk refers to In a currency swap, the swap bank would be worse off if opposite currency moved in a opposite direction.
  - D. Both (a) and (c)
56. In the international context, the \_\_\_\_\_ interest rate involves only the MNC parent's currency, while the \_\_\_\_\_ interest rate includes any forecast appreciation or depreciation of a foreign currency relative to that of the MNC parent.
- A. effective; nominal
  - B. macro; nominal
  - C. nominal; effective
  - D. nominal; micro

57.

Option	Cost of Option	Striking Price Per Share	Current Market Value of Underlying Company shares
Call (100 shares)	Rs. 200	Rs. 25	Rs. 30
Warrant (1 warrant may purchase 3 shares of company)	6	40	46
Put (100 shares)	Rs. 250	Rs. 50	Rs. 45

Which of the below mentioned statement is TRUE (in terms of profit)?

- A. Put is better than Call, by Rs. 150
- B. Warrant is better than Put, by Rs. 47.5
- C. Put is better than Warrant, by Rs. 147.5
- D. Call is better than Put, by Rs. 50

**Answer question 58-60 referring the paragraph below.**

A multinational company has two subsidiaries, one in Ireland (local currency, Irish pound) and the other in West Germany (local currency, Deutsche mark). Pro forma statements of operations indicate the following short-term financial needs for each subsidiary (in equivalent U.S. dollars): Ireland: \$25 million excess cash to be invested (lent) West Germany: \$10 million funds to be raised (borrowed).

The local regulations do not permit a subsidiary to use the domestic market of any other subsidiary.

The following financial data is also available:

Item	Currency		
	U.S. dollars	Irish pound	Deutsche mark
Spot exchange rates		.7418/U.S.\$	2.0138/U.S.\$
Forecast %		+1%	-1.5%
Interest rates			
Nominal			
Euromarket	7.5%	6%	5%
Domestic	6.5	6.25	5.5
Effective			
Euromarket	7.5%	?	?
Domestic	6.5	?	?

58. Determine the effective rates of interest for Irish pound mark in the Euromarket.
- 8.5%
  - 7.25%
  - 7%
  - 6%
59. Where should the funds be invested?
- Irish pound in Euromarket
  - Irish pound in Domestic market
  - USD in Euromarket
  - USD in Domestic market
60. Where should the funds be raised?
- Deutsche marks in Domestic market
  - Irish pound in Domestic market
  - Deutsche marks in Euromarket
  - Irish pound in Euromarket