INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

24th May 2012

Subject CT2 – Finance and Financial Reporting

Time allowed: Three Hours (10.00 – 13.00 Hrs)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

1. ***Please read the instructions on the front page of answer booklet and instructions to examinees sent along with hall ticket carefully and follow without exception***
2. ***Mark allocations are shown in brackets.***
3. ***Attempt all questions, beginning your answer to each question on a separate sheet. However, answers to objective type questions could be written on the same sheet.***
4. ***In addition to this paper you will be provided with graph paper, if required.***
5. ***Please check if you have received complete Question Paper and no page is missing. If so, kindly get new set of Question Paper from the Invigilator.***

AT THE END OF THE EXAMINATION
Please return your answer book and this question paper to the supervisor separately.

Q. 1) Withholding tax is defined as

A. Tax deducted from interest/dividends paid to non -residents investors
B. Tax deducted from interest/dividends paid to residents investors
C. Simply tax paid by any investors on any investment income
D. A form of Indirect tax

[2]

Q. 2) Agency costs arise due to

A. Money spent on agents of insurance companies
B. Money spent on agents travel ling expenses
C. Principal agent problems
D. Cost of mistakes of managers despite the fact that they were working in the owners best interest

[2]

Q. 3) Modigliani and Miller theory of capital works if

A. There are information asymmetries in financial system
B. Personal and company tax rates are different
C. Debt capital is in finite supply
D. Taxes are zero

[2]

Q. 4) Which one of the following does NOT have trustees?

A. self administered pension fund
B. debenture stock
C. unit trust
D. mutual life office

[2]

Q. 5) What is the principal method by which Indian Government stocks are currently issued?

A. placing
B. tender
C. auction
D. introduction

[2]

Q. 6) An ordinary share may have a low dividend yield because:

A. dividend growth prospects are poor
B. it is inexpensive
C. dividend cover is high
D. it is not listed in the stock exchange

[2]

Q. 7) Which of the following is true for a partnership?

A. All partnerships must have a partnership agreement
B. Partners can have a negative capital invested in the firm
C. A client dis-satisfied by services of one partner cannot sue him alone as all partners are liable
D. Unlike a partnership, members of a limited liability partnership have limited liability but unlike a company the setup does not have a separate legal entity

[2]

Q. 8) Which of the following expenses will be added back to accounting profit to arrive at taxable profit?

A. Use of own car and driver for business purposes
B. Mobile phones provided to employees
C. Meal vouchers given to employees
D. Subsidized meals in canteen provided to employees

[2]

Q. 9) If you determine that BSE 100 index futures are overpriced relative to the spot BSE 100 index, which of the following strategy will you adopt to make an arbitrage profit:

A. buying all the stocks in the BSE 100 index and selling put options on the BSE 100 index
B. selling BSE 100 index futures and buying all stocks in the BSE 100
C. selling short all the stocks in the BSE 100 index and buying BSE 100 futures
D. selling all the stocks in the BSE 100 and buying call options on the BSE 100 index

[2]

Q. 10) A company's profit after tax for an accounting period is Rs.27.5m. Issued share capital consists of 50m ordinary shares of Re1. There are no preference shares. A dividend of 22p per share is paid for the period and the market price per ordinary share is Rs3.90. Dividend cover and dividend yield for the period are:

A. 0.4 and 17.7%
B. 0.4 and 5.64%
C. 2.5 and 22%
D. 2.5 and 5.64%

[2]

Q. 11) What type of long-term financial instrument would you recommend to the following investors:

A. Gabrielle who is her early 40s, has a huge sum of money given to her by her millionaire husband and no financial obligations. She is an optimist who enjoys playing poker with other society ladies even though she sometime loses.

B. Susan also in her mid 30s, who has inherited a decent fortune from a distant relative. She is a school teacher and currently paying off a debt. She would like to use this money to build a college fund for her five year old son.

Give reasons in support of your suggestions and also mention the main features of the investments suggested.

[4]

Q. 12) **i.** What is the main aim of a financial manager? (1)

ii. Give an example of how taxation affects the capital structure decision? (1)

iii. What do you think would be the likely stock market reaction to announcement of increase in dividend payment by a company? (2)

iv. Given below is the balance sheet of Dabang Bikes Co. Ltd. for last three years. As at 31 December 2011 the company has declared a dividend totaling Rs.35 crores. How do you expect an informed investor to react? (3)

Year ending 31 December (in Rs. Crores)	**2009**	**2010**	**2011**
Net income (earnings)	104	93	65
Cash flow from operations	76	80	56
Capital expenditure	22	24	33
Net borrowing	49	35	60
Dividends paid	21	26	30

[7]

Q. 13) Chuck purchased a motor vehicle from Van der Woodsen Co Ltd on 1 January 2012 with a cash price of Rs 34, 651. The hire purchase term is 4 years with Rs10,000 to be paid annually on 31 December starting 31 December 2012. Interest is calculated at 6% per annum on outstanding balances. As part of the accounting policies, Chuck uses the “reducing balance” method at 20% to depreciate all its vehicles, assuming no residual value at the end of the assets useful life.

Show the calculation of the interests and the amount due at the end of each year during the hire purchase term. (3)

Also calculate the depreciation charged for years 2012 and 2013 for the above motor vehicle. (1)

[4]

Q. 14) **i.** State the main differences between a forward and a future. (1)

ii. State the main differences between a scrip issue and a rights issue. (1)

[2]

Q. 15) **i.** The current ratio of a company is 2.5:1. State with reasons which of the following would improve, reduce or not change the ratio:

A. Repayment of long term debts
B. Bills receivable drawn on debtors for 2 months
C. Sale of goods for cash Rs20,000 (cost Rs24,000)
D. Purchase of computer for accounts section on credit, allowed by the vendor for two months. (2)

ii. Mr. Gupta owns a business and gives the following figures:

Particulars	**2010 (Rs)**	**2011 (Rs)**
Sales	9,00,000	18,00,000
Gross Profit	2,25,000	3,60,000
Current assets	3,00,000	4,50,000
Current liabilities	1,50,000	2,50,000

He is of the opinion that this manager Kabir is very efficient as there is an increase in profit from Rs 2.25lacs to Rs 3.6lacs by his efforts. Again the current assets have increased from Rs3lacs to Rs4.5lacs whereas current liabilities have increased by only Rs1lac and thus the short term financial position is also becoming strong.

Do you agree with him? State yes/no. Give reasons for your answer. (3)

[5]

Q.16) **i.** Explain five sources of Systemic risks. (5)

ii. From the following capital structure determine the appropriate weighted average cost of capital using the market value weights.

Equity shares	3800000
Preference shares	800000
Debentures	5000000
15% Bank Loan-Long term	1800000
14% Bank Loan-Short term	1400000
Trade creditors	600000

Additional information :

1. Equity shares include the existing 60000 shares having current market value of Rs. 40 per share and the balance is net proceeds from the new issue in the current year (issue price of the share, Rs 40, face value Rs. 10; floatation cost per share Rs. 5) The projected EPS and DPS for the current year are Rs. 8 and Rs. 5 respectively.
2. Dividend indicated on preference shares is 16%
3. Interest rate for debentures 15.5%
4. Corporate tax 35%
5. Dividend tax 10%
6. Market value of preference shares is 850000.

(15)

[20]

Q.17) **i.** You have recently joined a company after completing graduation in commerce. You are given the following information to analyze and comment upon the company's management of cash.

Particulars	**Rs.**
Operating profit before working capital changes	6,00,000
Cash used in investing activity	(3,20,000)
Issue of shares for cash	10,00,000
Loan paid off	2,00,000

Debtors at the beginning of the year were Rs 4,40,000, and at the end of the year Rs7,40,000. Creditors increased by Rs 70,000 during the year. Outstanding rent during the year was Rs 25,000. (3)

ii. Given below is the trial balance of R. L. Ltd. Prepare an income statement and balance sheet as at 31 December 2011:

Debit Balances	Rs.	Credit Balances	Rs.
Insurance charges	2,400	Capital	170,000
Salaries and wages	19,400	Sundry Creditors	20,000
Cash in hand	6200	Sales	120,000
Cash at HSBC bank	26,500	Returns outwards	1,200
Trade expenses	400	Provision for doubtful debts	400
Postage and courier	800	Rent of premises, sublet for one year to 30 June 2012	2,000
Plant & Machinery:			
Balance on 1 Jan 2011	120,000		
Additions on 1 July 2011	5,000		
Stock on 1 Jan 2011	15,000		
Purchases	82,000		
Returns inwards	2,000		
Debtors	20,800		
Furniture & fixtures	5,000		
Freight & Duty	2,000		
Carriage outwards	500		
Rent, rates & taxes	4,600		
Printing &Stationery	1,000		
	313,600		**313,600**

Adjustments:

i) Stock on 31st December 2011 was valued at Rs.24,000 and stationery unused at the end was Rs.250.

ii) The provision for doubtful debts is to be maintained at 6% on sundry debtors

iii) Write off Rs.800 as bad debts

iv) Provide depreciation on plant and machinery @10% p.a.

v) Insurance is paid upto 31 March 2012

vi) A fire occurred on 25th December 2011 in the Godown and stock of the value of Rs.6,000 was destroyed. It was insured and the insurance company admitted a claim of Rs.4,000. (17)

[20]

Q.18) Zimeet industries Ltd anticipate a 15% Increase in sales over the present level of Rs. 7.5 crore. As it is currently operating at full capacity, the firm is contemplating increasing its capacity by increasing its investment in assets. Its latest balance sheet as on March 31 is summarized below:

Liabilities	Amount (Lakhs)	Assets	Amount (Lakhs)
Equity Capital	218.35	Net Fixed assets	240.00
Retained earnings	90.50	Marketable securities	20.00
Long term debt	22.50	Debtors	112.50
Sundry creditors	82.50	Inventory	127.50
Bank Loan	26.15		
Other current Liabilities	60.00		
	500.00		**500.00**

(i) If the company expects to maintain its previous year's total asset turnover (based on sales) ratio, determine the expected level of total assets, and the extent of additional funds required to finance the incremental assets. (2)

(ii) Express the past year's balance sheet as a percentage of sales. Indicate which items on the balance sheet are likely to move with sales. Also state the amount to be met by the spontaneous increase in liabilities. (5)

(iii) If the company maintains the current level of net profit margin on sales at 6%, as also the current D/P ratio of 40%, indicate the additional external financing requirement. (5)

(iv) Prepare a Performa balance sheet assuming that additional financing needs IF ANY, can be met from additional bank loans. (3)

(v) If the company has excess production capacity and did not anticipate increasing its fixed assets, what would be the requirement of additional external funds? (3)

[18]

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