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**MANIPAL INSTITUTE OF TECHNOLOGY**  
Manipal University, Manipal – 576 104



**VI SEM. B.E.(COMPUTER ENGG.) DEGREE END SEMESTER  
EXAMINATIONS MAY - 2011**

**SUBJECT: FINANCIAL MANAGEMENT (HUM-304)  
REVISED CREDIT SYSTEM  
(16/05/2011)**

Time: 3 Hours.

MAX.MARKS: 50

**Instructions to Candidates:**

- ❖ Answer **ANY FIVE FULL** questions.
- ❖ Use of interest factor tables is permitted.

- 1A) A company is undertaking a program to reduce operating costs. The Vice President in charge of operations has established a goal of saving an equivalent total present amount of \$ 90,000 in the next 4 years through reduced finished product losses. He estimates that the company will be able to save \$40,000 in the first year but cost reductions will become more difficult each year. If the reductions are expected to follow a uniformly decreasing gradient, what must be the reductions in years 2, 3 and 4 in order for the company to meet its established goal? The company's interest rate is 15% per year. (05)
- 1B) From the following information prepare journal entries for all transactions and ledger entries of Cash account only . (05)

Particulars	Amount(Rs.)
Commenced business with cash	38,000
Purchased goods for cash	6,500
Purchased goods from Hari	7,500
Sold goods to Keshav	10,800
Sold goods for cash	4,700
Paid salaries	3,200
Cash received from Keshav	9,600
Cash paid to Hari	6,900
Rent paid	700

2A) Prove that irrespective of the duration, the value of the equity share according to dividend capitalization approach is equal to total present value of infinite stream of dividend payments determined at the investors required rate of return and discuss the valuation with constant growth in dividends. (05)

2B) You are given the balance sheet and the income statement for the current year. (05)

**Balance sheet for the current year (Rs. Million).**

<b>Liabilities</b>	<b>Amount</b>	<b>Assets</b>	<b>Amount</b>
Share capital	170	Net fixed assets	1000
Retained earnings	766	Cash	10
Long term loan	754	Sundry debtors	375
Creditors	60	Inventories	615
Bills payable	110	-----	-----
Other current liabilities	140	-----	-----
<b>Total</b>	<b>2000</b>	<b>Total</b>	<b>2000</b>

**Income statement (Rs. Millions)**

Net sales	3000
Cost of goods sold	2616.2
Depreciation	100
Interest	88
Tax	40%

**You are required to:**

- Calculate Short Term Solvency Ratios and any three Profitability ratios

3A) The following details are available for a investment proposal (05)

Life=13 years

Initial Investment = Rs. 3,00,000

Cost of capital = 16%

NPV= Rs. 60,000

Determine the IRR?

3B) Following financial statements are given to you.

(05)

<b>Liabilities</b>	<b>2003</b>	<b>2004</b>
Share capital	150	150
Reserves and surplus	180	210
Long term debt	285	240
Short term loan	210	240
Creditors	150	180
Provisions	60	45
<b>Total</b>	<b>1035</b>	<b>1065</b>
<b>Assets</b>	<b>2003</b>	<b>2004</b>
Net fixed assets	540	570
Inventories	210	180
Debtors	180	210
Cash	60	45
Other non current assets	45	60
<b>Total</b>	<b>1035</b>	<b>1065</b>

#### Income Statement for the year 2004

<b>Particulars</b>	<b>Amount</b>
Net sales	2400
Cost of goods sold	1560
Operating expenses	450
Depreciation	20
Other income	(150)
Interest	90
Tax	60
Dividends	60

You are required to prepare sources and uses of funds on cash basis

4A) Write a short note on

(2½+2½)

i) Liquidation Value

ii) PCD

4B) Explain in detail the contents of Balance Sheet and Income Statement with suitable formats.

(05)

5A) A person starts a retirement account by depositing Rs. 10,000 now and deposits Rs. 300 each month for the next 10 years. How much money can be withdrawn per month for 5 years if he makes his first withdrawal 3 months after his last deposit? The interest rate is 18% per year compounded monthly?

(05)

- 5B) A company is selling 2500 units per month at a selling price of Rs. 200 per unit . It has a material cost of Rs.100 per unit, Manufacturing expenses of Rs.30 per unit and over heads of Rs.20 per unit. You are required to calculate Gross Working Capital if Raw materials stage is 2 months, Work-in-process stage 1 month, Finished goods stage  $\frac{1}{2}$  a month and debtors stage 1 month. (05)
- 6A) A temporary warehouse with a zero salvage value at any point of time can be built for \$ 15,000. The annual value of storage space less annual maintenance and operating cost is estimated to be \$ 2,500. If the cost of capital is 12% and the warehouse is used for 8 years, will this be a desirable investment? If not for what life will this be a desirable investment? (05)
- 6B) Derive an equation for Degree of Operating Leverage and Degree of Financial Leverage with usual notations. (05)