



MANIPAL INSTITUTE OF TECHNOLOGY
Manipal University, Manipal – 576 104



**VI SEM. B.E. (COMPUTER SCIENCE & ENGG.) DEGREE END SEMESTER
(MAKE-UP/SUMMER COURSE) EXAMINATIONS JULY- 2011**

**SUBJECT: FINANCIAL MANAGEMENT (HUM-304)
REVISED CREDIT SYSTEM
(12/07/2011)**

Time: 3 Hours.

MAX.MARKS: 50

Instructions to Candidates:

- ❖ Answer **ANY FIVE FULL** questions.
- ❖ Missing data, if any, may be suitably assumed.
- ❖ Use of Interest factor table is permitted.

- 1A)** (i) A Rs. 100 face value preference share carries a dividend of 12% with a maturity period of 8 years. Determine its value today if the required rate of return is 15% and the preference share is matured at a premium of 10%.
(ii) A Company has Rs. 100 face value irredeemable preference shares on which it pays a dividend of Rs. 9. Assume that this type of preference share is currently yielding a dividend of 11%, what is the current value of the preference share? **(03)**
- 1B)** To help you reach your Rs.1,00,000 goal for higher education, your father offers to give you Rs.40,000 one year from now. You will get a part time job and make six additional payments of equal amounts each six months thereafter. If all of this money is deposited in a bank which pays 8%, compounded semiannually, how large must each of the six payments be? What is the effective rate being paid by the bank? **(04)**
- 1C)** A project needs an investment of Rs. 1, 38,500. The cost of capital is 12%. The net cash inflows are as under:

Year	1	2	3	4	5
Net cash inflows	30,000	40,000	60,000	30,000	20,000

Calculate the Internal Rate of Return and suggest whether the project should be accepted or not. **(03)**

- 2A)** Bank A pays 8% interest, compounded quarterly, on its money market account. The manager of Bank B want its money market account to equal bank A's effective annual rate, but interest is to be compounded on a monthly basis. What nominal rate must Bank B set? **(02)**

- 2B)** The following is the balance sheet of a company:

BALANCE SHEET

<i>Liabilities</i>	<i>Amount</i>	<i>Assets</i>	<i>Amount</i>
Equity Capital (Rs. 10 per share)	Rs. 60,000	Net Fixed Assets	Rs. 1,50,000
10% Long-term Debt	Rs. 80,000	Current Assets	Rs. 50,000
Retained Earnings	Rs.20,000		
Current Liabilities	Rs. 40,000		
TOTAL	Rs. 2,00,000	TOTAL	Rs. 2,00,000

The company's total assets turnover ratio is 3.0, its variable operating costs ratio is 40% of sales and its fixed operating costs are Rs. 1, 00,000. The income tax rate is 50%.

(a) Calculate for the company all the three types of leverages.

(b) Determine the likely level of *EBIT* if *EPS* is (i) Rs. 1 and (ii) Zero

(05)

- 2C)** Snyder Computer chips Inc. is experiencing a period of rapid growth. Dividends are expected to grow at a rate of 15% during the next 2 years, at 13% in the third year, and at a constant rate of 6% thereafter. Snyder's last dividend was Rs.1.15, and the required rate of return on the stock is 12%. Calculate the value of the stock today.

(03)

- 3A)** The directors of Alpha limited are contemplating the purchase of a new machine to replace a machine which has been in operation in the factory for the last 5 years. Interest on capital has to be paid at 8% per annum. Tax to be paid is expected at 50% of the net earnings of each year.

You are requested to suggest which of the two alternatives should be preferred on the principle of (i) Pay-back period method and (ii) Accounting Rate of Return method.

(05)

	Old Machine	New Machine
Purchase price	Rs. 40,000	Rs. 60,000
Estimated life of machine	10 years	10 years
Machine running hours per annum	2,000	2,000
Units produced per hour	24	36
Wages per running hour	Rs. 3	Rs. 5.25
Power per annum	Rs. 2,000	Rs. 4,500
Consumables stores per annum	Rs. 6,000	Rs. 7,500
All other charges per annum	Rs. 8,000	Rs. 9,000
Material cost per unit	Rs. 0.50	Rs. 0.50
Selling price per unit	Rs. 1.25	Rs. 1.25

You may assume that the above information regarding sales and cost of sales will hold good throughout the economic life of each of the machine.

- 3B)** The receivables of a company constitute 60% of current assets. The current ratio of the company stands at 1.3, total assets turnover ratio is 1.2 and total assets are 2.5 times the current assets. If the current liabilities of the company are Rs.16, 00,000, find the average collection period.

(03)

- 3C)** What are the differences between Journal & Ledger?

(02)

- 4A)** On 1st January of the year, the Managing Director of 'X' Ltd wanted to know the amount of working capital that will be required during the year. From the following information, prepare the forecast of working capital requirements. Production in the last year was 60,000 units. The same will be the production of the year.

Estimated ratios of different costs to selling prices are:

Raw Materials – 60%; Direct Wages – 10%; Overheads – 20%.

Raw materials will remain in store, on an average for 2 months, before issued for production. Each unit will be in production process for 1 month with the raw materials being fed into pipeline immediately. The labour and overhead costs will occur evenly during the period. Finished goods will stay in the warehouse, awaiting dispatch to customers, approximately 3 months. Credit allowed to debtors is 3 months from the date of dispatch. Credit allowed by creditors is 2 months from the date of delivery of raw materials. There are regular production and sales cycles.

Wages are paid on 1st day of a month. The company keeps normally Rs. 20,000 as cash in hand. Selling price is Rs. 5 per unit. (05)

- 4B)** Operating leverage is determined by firm's cost structure and financial leverage by the mix of debt-equity funds used to finance the firm's fixed assets. These two leverages combined provide a risk profile of the firm. Discuss. (02)

- 4C)** Distinguish between:

- (a) Shares and Debentures
(b) Preference Shares and Equity Shares (03)

- 5A)** Prepare a Common-size Balance Sheet of XY Ltd. and interpret the results from its following Balance Sheet for the years ending 31st December 2006 and 2007. (02)

<i>Liabilities</i>	<i>2006 Rs.</i>	<i>2007 Rs.</i>	<i>Assets</i>	<i>2006 Rs.</i>	<i>2007 Rs.</i>
Equity Share Capital	3,00,000	4,30,000	Net Fixed Assets	3,40,000	4,50,000
Preference Share	1,00,000	1,50,000	Stock	40,000	50,000
Reserves	20,000	30,000	Debtors	1,00,000	1,25,000
Profit and Loss A/c	15,000	20,000	Bills Receivables	20,000	60,000
Bank Overdraft	50,000	50,000	Prepaid Expenses	10,000	12,000
Creditors	40,000	50,000	Cash in hand	40,000	53,000
Provision for tax	20,000	25,000	Cash at banks	10,000	30,000
Proposed Dividend	15,000	25,000			
TOTAL	5,60,000	7,80,000	TOTAL	5,60,000	7,80,000

- 5B)** Prepare a comparative balance sheet and statement showing flow of funds on Total Resource basis for XY Ltd. (03)

- 5C)** Calculate (i) Current Ratio (ii) Acid-test Ratio for XY Ltd .and comment. (03)

- 5D)** Discuss the Du Pont analysis. (02)

- 6A)** (i) Journalize the following transactions:
2007 (04)

- April 1. Sham commenced business with Rs. 2, 00,000/- in cash.
3. He buys merchandise of Rs.1, 50,000/- on account from Dhamesh.
5. He buys furniture for Rs. 30,000/- on account from Narain.
8. He pays Narain Rs.29, 000/-.
10. He pays Dhamesh Rs.30, 000/-.
15. Cash sales Rs.50, 000/-.
18. He sells goods to Rajesh on credit Rs.7, 000/-.
30. Salary paid in cash, Rs.5, 000/-.

- (ii) From the above journal entry prepare the Cash Ledger Account & also balance the account. (02)

- 6B)** From the following information, extracted from the books of a manufacturing company, compute the operating cycle in days and the amount of working capital required:

Period covered 365 days
Average period of credit allowed by suppliers 16 days

	(Rs. In '000)
Average Total of Debtors outstanding	480
Raw Material Consumption	4,400
Total Production Cost	10,000
Total Cost of Sales	10,500
Sales for the year	16,000
Value of Average stock maintained	
Raw Material	320
Work-in-progress	350
Finished Goods	260

(04)