	BM – FM2 Course		
Quiz I Examination, Date:			
Weightage	**20%**	**Duration**	**90 minutes**

Name ______________________ **Roll No**. ______________________

INSTRUCTIONS

1. Closed book exam.
2. Students cannot use laptop. Students cannot bring their mobiles inside exam room.

You are not allowed to borrow papers, calculators, etc. you are required to work out the complete solution in the answer sheets provided. Please answer each question in a new page.

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.

1. **Stock repurchase**

Harte Textiles, Inc., a maker of custom upholstery fabrics, is concerned about preserving the wealth of its stockholders during a cyclical downturn in the home furnishings business. The company has maintained a constant dividend payout of $2.00 tied to a target payout ratio of 40%.

Management is preparing a share repurchase recommendation to present to the firm's board of directors. The following data have been gathered from the last two years:

	1999	2000
Earnings available for common stockholders	$1,260,000	$1,200,000
Number of shares outstanding	300,000	300,000
Earnings per share	$4.20	$4.00
Market price per share	$23.50	$20.00
Price/earnings ratio	5.6	5.0

a) How many shares should the company have outstanding in order to combine the earnings available for common stockholders of $1,200,000 in the year 2000 and a dividend of $2.00 to produce the desired payout ratio of 40%? *(Max 2 marks)*

b) How many shares would have to be repurchased to have the level of shares outstanding calculated in the above question? *(Max 1 marks)*

2. **Establishing General Access Company's Dividend Policy and Initial Dividend**

General Access Company (GAC) is a fast-growing Internet access provider that initially went public in early 1994. Its revenue growth and profitability have steadily risen since the firm's inception in late 1992. GAC's growth has been financed through the initial common stock offering, the sale of bonds in 1997, and the retention of all earnings. Because of its rapid growth in revenue and profits, with only short-term earnings declines, GAC's common stockholders have been content to let the firm reinvest earnings to expand capacity to meet the growing demand for its services. This strategy has benefited most stockholders in terms of stock splits and capital gains. Since the company's initial public offering in 1994, GAC's stock twice has been split 2-for-1. In terms of total growth, the market price of GAC's stock, after adjustment for stock splits, has increased by 800 percent during the six-year period, 1994-2000.

Because GAC's rapid growth is beginning to slow, the firm's CEO, Marilyn McNeely, believes that its shares are becoming less attractive to investors. Ms. McNeely has had discussions with her CFO, Bobby Joe Rook, who believes that the firm must begin to pay cash dividends. He argues that many investors value regular dividends, and that by beginning to pay them, GAC would increase the demand-and therefore price-for its shares. Ms. McNeely decided that at the next board meeting she would propose that the firm begin to pay dividends on a regular basis.

Ms. McNeely realized that if the board approved her recommendation, it would have to (1) establish a dividend policy and (2) set the amount of the initial annual dividend. She had Mr. Rook prepare the summary of the firm's annual EPS given in the following table.

Year	**EPS**	**Year**	**EPS**
2000	$3.70	1996	$2.20
1999	4.10	1995	.83
1998	3.90	1994	.55
1997	3.30		

Mr. Rook indicated that he expects EPS to remain within 10% (plus or minus) of the most recent (2000) value during the next three years. His most likely estimate is an annual increase of about 5%.

After much discussion, Ms. McNeely and Mr. Rook agreed that she would recommend to the board one of the following types of dividend policies:

1. Constant-payout-ratio dividend policy
2. Regular dividend policy
3. Low-regular-and-extra dividend policy

Ms. McNeely realizes that her dividend proposal would significantly affect the firm's share price and future financing opportunities and costs. She also knows that she must be sure her proposal is complete and that it fully educates the board with regard to the long-run implications of each policy.

Required

a) Which dividend policy would you recommend? Justify your recommendation. *(Max 2 marks)*
b) What are the key factors to consider when setting the amount of a firm's initial annual dividend? (Mention in bullet points). *(Max 1 marks)*

c) In view of your dividend policy recommendation in **a**, how large an initial dividend would you recommend? Justify your recommendation. *(Max 1 marks)*

3. **CASA DE DISENO**

In January 2001, Teresa Leal was named treasurer of Casa de Diseno. She decided that she could best orient herself by systematically examining each area of the company's financial operations. She began by studying the firm's short-term financial activities.

Casa de Diseno is located in southern California and specializes in a furniture line called "Ligne Moderna." Of high quality and contemporary design, the furniture appeals to the customer who wants something unique for his or her home or apartment. Most Ligne Moderna furniture is built by special order, because a wide variety of upholstery, accent trimming, and colors are available. The product line is distributed through exclusive dealership arrangements with well-established retail stores. Casa de Diseno's manufacturing process virtually eliminates the use of wood.Pplastic and metal provide the basic framework, and wood is used only for decorative purposes.

Casa de Diseno entered the plastic furniture market in late 1995. The company markets its plastic furniture products as indoor-outdoor items under the brand name "Futuro." Futuro plastic furniture emphasizes comfort; durability, and practicality, and is distributed through wholesalers. The Futuro line' has been very successful, accounting for nearly 40 percent of the firm's sales and profits in 2000. Casa de Diseno anticipates some additions to the Futuro line and also some limited change of direction in its promotion in an effort to expand the applications of the plastic furniture.

Ms.Leal has decided to study the firm's cash management practices. To determine the effects of these practices, she must first determine the current operating and cash conversion cycles. In her investigations, she found that Casa de Diseno purchases all of its raw materials and production supplies on open account. The company is operating at production levels that preclude volume discounts. Most suppliers do not offer cash discounts, and Casa de Diseno usually receives credit terms of net 30. An analysis of Casa de Diseno's accounts payable showed that its average payment period is 30 days. Leal consulted industry data and found that the industry average payment period was 39 days. Investigation of six California furniture manufacturers revealed that their average payment period was also 39 days.

Next, Leal studied the production cycle and inventory policies. Casa de Diseno tries not to hold any more inventory than necessary in either raw materials or finished goods. The average inventory age was 110 days. Leal determined that the industry standard as reported in a survey done by Furniture Age, the trade association journal, was 83 days.

Casa de Diseno sells to all of its customers on a net 60 basis, in line with the industry trend to grant such credit terms on specially, furniture. Leal discovered, by aging the accounts receivable, that the average collection period for the firm was 75 days. Investigation of the trade association's and California manufacturers' averages showed that the same collection period existed where net 60 credit terms were given. Where cash discounts were offered, the collection period was significantly shortened. Leal believed that if Casa de Diseno were to offer credit terms of 3/10 net 60, the average collection period could be reduced by 40 percent.

Casa de Diseno was spending an estimated $26,500,000 per year on operating cycle investments. Leal considered this expenditure level to be the minimum she could expect the firm to disburse during 2001. Her concern was whether the firm's cash management was as efficient as it could be. She knew that the company paid 15 percent for its negotiated financing. For this reason, she was concerned about the financing cost resulting from any inefficiencies in the management of Casa de Diseno's cash conversion cycle.

Required

a) Assuming a constant rate for purchases, production, and sales throughout the year, what are Casa de Diseno's existing operating cycle (OC), cash conversion cycle (CCC), and negotiated financing needs? *(Max 1 marks)*

b) If Leal can optimize Casa de Diseno's operations according to industry standards, what would Casa de Diseno's operating cycle (OC), cash conversion cycle (CCC), and negotiated financing need be under these more efficient conditions? *(Max 1 marks)*

c) In terms of negotiated financing requirements, what is the cost of Casa de Diseno's operational inefficiency? *(Max 1 marks)*

d) (1) If in addition to achieving industry standards for payables and inventory, the firm can reduce the average collection period by offering 3/10 net 60 credit terms, what additional savings in negotiated financing costs would result from the shortened cash conversion cycle, assuming that the level of sales remains constant? *(Max 1 marks)*

(2) If the firm's sales (all on credit) are $40,000,000 and 45 percent of the customers are expected to take the cash discount, by how much will the firm's annual revenues be reduced as a result of the discount? *(Max 1 marks)*

(3) If the firm's variable cost of the $40,000,000 in sales is 80 percent, determine the reduction in the average investment in accounts receivable and the annual savings resulting from this reduced investment assuming that sales remain constant. (Assume a 360-day year.) *(Max 1 marks)*

(4)If the firm's bad debt expenses decline from 2 to 1.5 percent of sales, what annual savings would result, assuming that sales remain constant? *(Max 1 marks)*

e) On the basis of your analysis in a through **d**, what recommendations would you offer Teresa Leal? *(Max 1 marks)*

4. **Evaluating Global Textiles' Proposed Change in Credit Terms**

Ken Steinbacher, a financial analyst for Global Textiles, has been asked to investigate a proposed change in the firm's credit terms. The company's founder and president believes that by increasing the credit period from 30 to 65 days, two important benefits will result: (1) sales will increase as a result of attracting new customers, and (2) some existing customers will purchase merchandise sooner to ensure its availability, given the unpredictable timing of the selling seasons. Annual sales are estimated to increase from the current level of $4,000,000 to $4,800,000. Eighty percent of this increase is expected to be attributable to new customers, and the other 20% is expected to result from existing customers. Because some existing customers will be making their purchases earlier than in the past, their actions will merely result in a shifting of inventory to accounts receivable. Ken estimated that the decline in inventory investment attributable to the actions of existing customers would just equal the additional accounts receivable investment associated with their actions.

Ken's investigation indicates that with the extended credit period, the firm's average collection period will increase from 45 to 90 days. In addition, bad will increase from 1 to 2 1/2% of sales. The firm's variable costs are expected to continue to amount to 80% of each $1 of sales. Global currently requires a 16% rate of return on equal-risk accounts receivable investments, and its cost of carrying $1 of inventory for 1 year is 26 cents.

Required

a) Find the additional annual profit contribution expected from the increased credit period. *(Max 1/2 marks)*

b) Determine the increase in Global's average investment in accounts receivable and the resulting annual cost attributable to the proposed increase in credit period. *(Max 1/2 marks)*

c) Calculate the annual savings resulting from the reduced inventory investment attributable to the existing customers' earlier purchases. *(Max 1/2 marks)*

d) Calculate the annual cost expected to result from the increase in bad debt expenses attributable to the proposed lengthening of the credit period. *(Max 1/2 marks)*

e) Use your findings in **a** through **d** to advise Ken on whether or not the proposed increase in the credit period can be financially justified. Explain recommendation. *(Max 1 marks)*

5. **Inventory financing**

Raymond Manufacturing faces a liquidity crisis-it needs a loan of $100,000 for 30 days. Having no source of additional unsecured borrowing, the firm must find a secured short-term lender. The firm's accounts receivable are quite low, but its inventory is considered liquid and reasonably good collateral. The book value of the inventory is $300,000, of which $120,000 is finished goods.

(1) City-Wide Bank will make a $100,000 trust receipt loan against the finished goods inventory. The annual interest rate on the loan is 12% on the out-standing loan balance plus a .25 % administration fee levied against the $100,000 initial loan amount. Because it will be liquidated as 'inventory is sold, the average amount owed over the month is expected to be $75,000.

(2) Sun State Bank will loan $100,000 against a floating lien on the book value of inventory for the 30-day period at an annual interest rate of 13%.

(3) Citizens' Bank and Trust will loan $100,000 against a warehouse receipt on the finished goods inventory and charge 15% annual interest on the outstanding loan balance. A .5% warehousing fee will be levied against the average amount borrowed. Because the loan will be liquidated as inventory is sold, the average loan balance is expected to be $60,000.

Required

a) Which plan do you recommend? Why? *(Max 1 marks)*

b) If the firm had made a purchase of $100,000 for which it had been given terms of 2/10 net 30, would it increase the firm's profitability to give up the discount and not borrow as recommended in the above question? Why or why not? *(Max 1 marks)*