Multiple Choice Instructions:
1. On the Scantron form in box labeled “Test No.” print “Final Exam”
2. Use the Scantron form to indicate your answers to the questions below.
3. Turn-in the Scantron sheet on the due date, you may keep the test questions.
4. Open book, open note, online searches are all allowed.
5. **NOT** allowed – using information from other students, people or from CPA exam review books.

Case Instructions:
The case is meant to challenge your critical thinking, problem solving and research skills in the context of a very specific problem facing the (internal and external) auditing industry. I recommend you take the questions in order since understanding the financial accounting rules in regards to stock options is vital in order to make good recommendations about internal controls and auditing procedures for this company.

1. Responses to the six questions listed at the end of the case materials must be **word processed**.
2. Answers should communicate the points you are making **clearly**, but **concisely**. Give consideration to when an answer would be best expressed in either a paragraph format or bulleted list.
3. Open book, open note, online searches are all allowed.
4. **NOT** allowed – using information from other students, people or from CPA exam review books.

Good luck with the exam – Kathy
Multiple Choice. Select the best answer.

1. Which of the following factors most likely would cause a CPA to decline to accept a new audit engagement?
   a. The CPA does not understand the entity’s operations and industry.
   b. Management acknowledges that the entity has had recurring operating losses.
   c. The CPA is unable to review the predecessor auditor’s working papers.
   d. Management is unwilling to permit inquiry of its legal counsel.

2. An auditor’s principal objective in analyzing repairs and maintenance expense accounts is to
   a. Determine that all obsolete plant and equipment assets were written off before the year end
   b. Verify that all recorded plant and equipment assets actually exist
   c. Discover expenditures that were expensed but should have been capitalized
   d. Identify plant and equipment assets that cannot be repaired and should be written off

3. At the conclusion of an audit, an auditor is reviewing the evidence gathered in support of the financial statements. With regard to the valuation of inventory, the auditor concludes that the evidence obtained is not sufficient to support management’s representations. Which of the following actions is the auditor most likely to take?
   a. Consult with the audit committee and issue a disclaimer of opinion
   b. Consult with the audit committee and issue a qualified opinion
   c. Obtain additional evidence regarding the valuation of inventory
   d. Obtain a statement from management supporting their inventory valuation

4. The auditor’s inventory observation test counts are traced to the client’s inventory listing to test for which of the following financial statement assertions?
   a. Completeness
   b. Rights and obligations
   c. Valuation or allocation
   d. Presentation and disclosure

5. Which of the following characteristics most likely would be an advantage for using classical variables sampling rather than probability-proportional-to-size (PPS) sampling?
   a. The selection of negative balances requires no special design considerations.
   b. The sampling process can begin before the complete population is available.
   c. The auditor need not consider the preliminary judgments about materiality.
   d. The sample will result in a smaller sample size if few errors are expected.
6. To obtain assurance that all inventory items in a client’s inventory listing are valid, an auditor most likely would trace
   a. Inventory tags noted during the auditor’s observation to items listed in receiving reports and vendors’ invoices
   b. Items listed in receiving reports and vendors’ invoices to the inventory listing
   c. Inventory tags noted during the auditor’s observation to items in the inventory listing
   d. Items in the inventory listing to inventory tags and the auditor’s recorded count sheets.

7. To determine whether accounts payable are complete, an auditor performs a test to verify that all merchandise received is recorded. The population of documents for this test consists of all
   a. Payment vouchers.
   b. Receiving reports.
   c. Purchase requisitions.
   d. Vendor’s invoices.

8. An auditor performs a test to determine whether all merchandise for which the client was billed was received. The population for this test consists of all
   a. Merchandise received.
   b. Vendors’ invoices.
   c. Canceled checks.
   d. Receiving reports.

9. Which of the following procedures would an auditor most likely perform in searching for unrecorded liabilities?
   a. Trace a sample of accounts payable entries recorded just before year-end to the unmatched receiving report file.
   b. Compare a sample of purchase orders issued just after year-end with the year-end accounts payable trial balance.
   c. Vouch a sample of cash disbursements recorded just after year-end to receiving reports and vendor invoices.
   d. Scan the cash disbursements entries record just before year-end for indications of unusual transactions.

10. An auditor vouched data for a sample of employees in a payroll register to approved clock card data to provide assurance that
    a. Payments to employees are computed at authorized rates.
    b. Employees work the number of hours for which they are paid.
    c. Segregation of duties exist between the preparation and distribution of the payroll.
    d. Internal controls relating to unclaimed payroll checks are operating effectively.
11. An auditor most likely would perform substantive tests of details on payroll transactions and balances when
   a. Cutoff tests indicate a substantial amount of accrued payroll expense.
   b. The assessed level of control risk relative to payroll transactions is low.
   c. Analytical procedures indicate unusual fluctuations in recurring payroll entries.
   d. Accrued payroll expense consists primarily of unpaid commissions.

12. Which of the following procedures would an auditor most likely perform in obtaining evidence about subsequent events?
   a. Determine that changes in employee pay rates after year-end were properly authorized.
   b. Recalculate depreciation charges for plant assets sold after year-end.
   c. Inquire about payroll checks that were recorded before year-end but cashed after year-end.
   d. Investigate changes in long-term debt occurring after year-end.

13. After considering an entity’s negative trends and financial difficulties, an auditor has substantial doubt about the entity’s ability to continue as a going concern. The auditor’s considerations relating to management’s plans for dealing with the adverse effects of these conditions most likely would include management’s plans to
   a. Increase current dividend distributions.
   b. Reduce existing lines of credit.
   c. Increase ownership equity.
   d. Purchase assets formerly leased.

14. While performing a test of details during an audit, the auditor determined that the sample results supported the conclusion that the recorded account balance was materially misstated. It was, in fact, not materially misstated. This situation illustrates the risk of
   a. Incorrect rejection.
   b. Incorrect acceptance.
   c. Assessing control risk too low.
   d. Assessing control risk too high.

15. An auditor is performing substantive tests of pricing and extensions of perpetual inventory balances consisting of a large number of items. Past experience indicates numerous pricing and extension errors. Which of the following statistical sampling approaches is most appropriate?
   a. Unstratified men-per-unit.
   c. Stop or go.
   d. Ratio or difference estimation.
16. In which of the following circumstances would an auditor usually choose between expressing a qualified opinion or disclaiming an opinion?
   a. Departure from generally accepted accounting principles.
   b. Inadequate disclosure of accounting policies.
   c. Inability to obtain sufficient appropriate audit evidence.
   d. Unreasonable justification for a change in accounting principle.

17. When auditing prepaid insurance, an auditor discovers that the original insurance policy on plant equipment is not available for inspection. The policy’s absence most likely indicates the possibility of a(n)
   a. Insurance premium due but not recorded.
   b. Deficiency in the coinsurance provision.
   c. Lien on the plant equipment.
   d. Understatement of insurance expense.

18. In auditing accrued expenses, an auditor’s procedures most likely would focus primarily on management’s assertion of
   a. Existence or occurrence.
   b. Presentation and disclosure.
   c. Completeness.
   d. Valuation or allocation.

19. Analytical procedures used in planning an audit should focus on
   a. Reducing the scope of tests of controls and substantive tests.
   b. Providing assurance that potential material misstatements will be identified.
   c. Enhancing the auditor’s understanding of the client’s business.
   d. Assessing the adequacy of the available evidential matter.

20. An auditor obtains knowledge about a new client’s business and its industry to
   a. Make constructive suggestions concerning improvements to the client’s internal control.
   b. Develop an attitude of professional skepticism concerning management’s financial statement assertions.
   c. Evaluate whether the aggregation of known misstatements causes the financial statements taken as a whole to be materially misstated.
   d. Understand the events and transactions that may have an effect on the client’s financial statements.
A Growing Problem: Backdating of Stock Options

The growing scandals related to the backdating of stock options were extensive. Glass Lewis & Company, a research and professional services firm that assists global interests that have financial or reputational exposure to public companies, reported that as of March 2006, over 150 companies had disclosed their involvement with backdating while 44 executives from 24 different companies suffered the consequences of involuntary or voluntary resignation. Backdating costs to these firms totaled over $10 billion consisting of $5.2 billion in the form of pretax compensation expenses and a drop in the value of the stock of 5.1 billion [1]. Many firms involved in the backdating of stock options were well recognized by the investing community, including: Analog Devices, Apple Computer, Applied Micro Circuits, Aspen Technology, Brocade Communications Systems, Clorox, Converse Technology, GAP, HealthSouth, Home Depot, Intuit, Inc., Juniper Networks, McAfee Inc., Microsoft, mSystems, Novell,Sharper Image, and Quest Software, among many others [2]. A majority of the companies cited as violating the appropriate dating of options provided technology and communications products and service. Since the discovery of the backdating fraud, the technology driven NASDAQ had declined by 12% [3].

Statements of Financial Accounting Standards No. 123, “Accounting for Stock-Based Compensation” (SFAS 123) required the recognition of compensation expense if the exercise price of the stock option was lower than the closing price on the date of grant [4]. Even though the exercise price of the stock option was below the market price of the stock on the date of grant, firms were able to report a higher net income by not recording any compensation expense, thus maintaining the stock’s price on the open market. Those shareholders who purchased the shares of firms that engaged in backdating activity and did not record the appropriate amount of compensation expense ended up paying a higher price for the stock during the reporting period affected by the fraud [5].

Regulators were alerted to the possibility of option backdating after the news media and stock analysts reported an unusually high correlation between the employee stock option (ESOP) grant date and the low point or range of a company’s stock price. Approximately 90% of the over 150 companies involved in this type of fraud initiated their own internal investigations. However, the Securities and Exchange Commission (SEC) and/or the Department of Justice were also conducting investigations [6]. In over 50% of the firms involved, shareholders had filed individual (derivative action) or class action lawsuits against corporate executives for breach of fiduciary duty as shareholders withstood the brunt of the fraud through decline in market value of their investment in company stock [2]. The SEC initiated a comprehensive investigation, issuing subpoenas to companies suspected of backdating. Criminal subpoenas were served by the Attorney General to companies and executives involved in the backdating scandals, while the Internal Revenue Service (IRS) investigated the tax-related issues associated
with executive compensation expense [6]. Two former executives of Converse Technology recently surrendered to the Federal Bureau of Investigation (FBI) and two executives of Brocade Communications Systems were out on bail after being charged with backdating options fraud [3].

Lashinsky of Fortune Magazine believed that options backdating was a “big deal”, a “pervasive rot in the system.” He wrote that ESOPs had been awarded to top executives to ensure higher compensation while shareholders of the company assumed the real financial risk. Corporate executives argued that those companies that did not offer ESOPs were at a disadvantage and could not compete for highly valued employees [7]. Regardless of the position taken, fraudulent recording of stock options would hurt all stakeholders of the corporation.

Legal and regulatory violations had occurred as misrepresentations and inaccuracies prevailed in SEC Form 4 filings. Consequences to companies that engaged in backdating could require booking additional compensation expense, adjustments to income tax liabilities, and restatement of previously issued financial statements. Internally, stock option plans had been violated. Internal controls appeared to be lacking or circumvented. The relevancy of Sarbanes-Oxley initiatives and the effectiveness of audit committees could be questioned. Stock prices of companies involved in backdating would decrease as the market responded to the accounting violations. As a result, shareholders could sue the corporation and its executives for losses suffered from the backdating action [6].

Background of mSystems

mSystems was incorporated on November 11, 1982 under Israeli law, and began operations in 1989. mSystems' main offices, research and development facilities, and some manufacturing facilities were located in Israel. All directors and officers of the company resided outside the United States.

The company developed, designed and marketed flash data storage devices for the consumer electronics markets, specifically the USB flash drive market and the mobile handset market. The embedded systems market was also targeted. The company experienced significant growth in revenues, ranging from $44.7 million in 2001 to $614.9 million in 2005, an increase of over 1200%. Customers consisted of large companies in the consumer electronics market, including: LG Corporation, Motorola, Inc., Palm, Inc., Samsung Corporation, and Sony Ericson Mobile Communications, among others. The USB flash drive concept was pioneered by mSystems, which held the patent for flash memory devices connected through a USB interface. Using its expertise related to the flash drive concept, the company developed a group of products to provide high capacity flash memory for mobile handsets. Types of electronic products that employed innovations in high capacity data storage applications included: digital audio (MP3) players, portable media players, digital video cameras, solid state drives in laptop computers, GPS devices, multimedia and music handsets, memory cards, and USB
flash drives. The demand for USB flash drives was expected to double from 2006 to 2010.

mSystems’ products were targeted to a small group of large original equipment manufacturers and consumer electronics companies. Because these customers purchased high volumes of product, there was intense competition for these customers. Additionally, these customers held extensive leverage when negotiating purchase terms, thus causing pricing pressures on mSystems and lowered gross margins. This specialized niche of the consumer electronics market operated in a large, high growth market and experienced intensive competition from large U.S. and international companies. Even though mSystems held the patent for flash memory devices, the technology was quickly changing and competitors could enter the market by introducing substitute products.

mSystems' core product sales relied heavily on two technologically-based products: mDrive and mDoc. The mDrive referred to the USB flash drive, previously known as DiscOnKey. mDoc was the embedded flash drive, previously known as Mobile DiskOnChip. During the years 2003 – 2005, the USB flash drives dominated product sales, equaling on average two-thirds (66.3%) of total product revenues (Table 1).

### TABLE 1: Revenue Breakdowns by Product

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB Flash Drives</td>
<td>61%</td>
<td>71%</td>
<td>67%</td>
</tr>
<tr>
<td>Mobile Handset &amp; Portable Devices</td>
<td>13%</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td>Embedded Systems</td>
<td>24%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Misc.</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

In addition to intensive product concentration, mSystems also experienced a concentration of sales in two major countries: the U.S. and Japan. The percentage of total revenues for these two countries averaged 31% for the U.S. and 26% for Japan over the three year period (Table 2).

### TABLE 2: Revenue Breakdowns by Country

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>United States</td>
<td>32%</td>
<td>26%</td>
<td>36%</td>
</tr>
<tr>
<td>Europe</td>
<td>16%</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>17%</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>Japan</td>
<td>20%</td>
<td>35%</td>
<td>23%</td>
</tr>
<tr>
<td>Far East (excluding Taiwan &amp; Japan)</td>
<td>13%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Even more dramatic, more than half of mSystems’ revenues came from a small number of customers (Table 3). More than one-third of total revenues (33.7%) were generated from three major customers during the years 2003 – 2005. A majority of sales were
made using standard purchase orders versus long-term purchase contracts. It would not be difficult for customers to divert their business from mSystems’ products to a competitor’s, particularly for the mDrive.

<table>
<thead>
<tr>
<th>TABLE 3: Concentrations of Customer Base</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Revenues of Top 3 Customers</td>
</tr>
<tr>
<td>Revenues of Top 10 Customers</td>
</tr>
</tbody>
</table>

Marketing was primarily targeted to companies that incorporated mSystems’ products into their own end product or repackaged mSystems’ products under its own brand names. Thus, mSystems leveraged its market position through the brand name of their customers to achieve market penetration. Sales managers were compensated based on salary and bonuses dependent on sales levels.

In 2004, mSystems' revenues grew by 220% compared to 2003, and revenues in 2005 grew by 47% in comparison to 2004. Revenue growth caused a strain on operations, and logistical and managerial resources. In December 2004, construction of a second manufacturing facility was initiated to handle a much needed increase in plant capacity. From January 2004 to December 2005, the work force was increased from 352 to 822 employees, equal to a 133% increase over the 2-year period.

Growth in product demand was attributed to a decline in prices for flash memory components as the demand for higher capacity storage had accelerated. Pricing of higher capacity storage data had declined, making it more affordable for consumers to replace their lower capacity storage devices. Consumer demand for these products continued as innovations in electronics that required high capacity storage, such as embedded digital cameras in mobile handsets and M3Ps, entered the market. However, the company was unsure if these state-of-the-art devices would eventually be replaced by more advanced data storage products.

In addition to the intense market competition, other risks related to competition included: rapid technological changes, evolving industry standards, rapidly declining selling prices of products, and rapid product obsolescence due to product substitution.

The Stock Option Fraud

In June 2006, the company’s Board of Directors appointed a Special Committee comprised of three external directors from mSystems’ Board of Directors to review the stock options that were previously granted. On June 9, 2006, mSystems appointed a new Chairman and a new Chief Operating Officer. A new interim Chief Financial Officer was also appointed at that time. These appointments took effect immediately and were based on the recommendations of the Special Committee [8]. On June 13, 2006, mSystems voluntarily informed the Securities and Exchange Commission of the internal investigation related to the backdating fraud. From June through July 2006, the Special
Committee conducted an intense review of the option granting procedures and provided recommendations for remediation to the Board of Directors. Findings from their investigation indicated that the actual measurement dates for past stock option grants differed from previously determined measurement dates. As a result, the company restated its financial statements for fiscal years ended 2003 through 2005, and revised financial information for the fiscal years ended 1999 through 2002. These revisions included the recognition of non-cash stock-based compensation expense and related tax liabilities which had not been recognized in the previously issued financial statements for the years affected. Table 4 presents the restatements for years 2001 – 2005 when the most dramatic effect of the additional expenses and liabilities were noted.

### Table 4: Restatement of Net Income, Stock Based Compensation Expense, and Related Tax Liabilities (000s omitted)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income as Previously Reported</td>
<td>($41,785)</td>
<td>($5,500)</td>
<td>$914</td>
<td>$24,150</td>
<td>$52,640</td>
</tr>
<tr>
<td>Stock-Based Compensation Expense</td>
<td>($2,135)</td>
<td>($1,695)</td>
<td>($3,832)</td>
<td>($3,385)</td>
<td>($3,082)</td>
</tr>
<tr>
<td>Related Tax Liabilities</td>
<td>($14)</td>
<td>($6)</td>
<td>($29)</td>
<td>($236)</td>
<td>($1,184)</td>
</tr>
<tr>
<td>Net Income (Loss) as Restated</td>
<td>($43,934)</td>
<td>($7,201)</td>
<td>($2,947)</td>
<td>$20,529</td>
<td>$48,374</td>
</tr>
</tbody>
</table>

The market price of the company shares decreased after the announcement of the internal review and the delay in filing the Annual Report because of the need to restate the previously issued financial information. The SEC also began an informal investigation related to the company’s stock option grants. mSystems' was listed on the NASDAQ stock exchange. In order to be listed with one of the U.S.-based national or registered securities exchange associations, foreign firms must register with the SEC and reconcile financial statement items prepared in accordance to the accounting rules of its home country to U.S. generally accepted accounting principles (GAAP). Registration and periodic reporting per the Securities Exchange Acts of 1933 and 1934 was required for foreign companies that had securities traded on the exchanges. Thus, foreign firms listed on the national exchanges were under the jurisdiction of the SEC.

The SEC had the power to register, as well as de-register firms listed on the national exchanges. The Securities Exchange Act of 1934 provided the SEC with disciplinary powers over firms under its jurisdiction and the persons associated with it. The Office of International Affairs (OIA) operates under the authority of the SEC and works with global law enforcement groups to promote regulatory compliance by foreign firms. The OIS seeks to ensure that international firms do not escape detection or prosecution of fraudulent securities actions [9].
The regulatory power of the SEC is far-reaching as cooperation of enforcement matters with foreign authorities has been facilitated through numerous bi-lateral agreements [10]. Given that mSystems self-reported the backdating of options and investigated the fraud internally through the appointment of a Special Committee, it appeared that full cooperation by the company would ensue. Although the company fully cooperated with the SEC upon voluntarily notifying them on June 13, 2006 of the stock option issues, the SEC could take action against the directors and or officers of the company pending the results of their investigation.

As a result of mSystems’ internal investigation, material internal control weaknesses over financial reporting for stock option grants were discovered. Proper measurement dates for measuring compensation expense were not determined. As of December 31, 2005, appropriate disclosure controls and procedures were not at a level that provided reasonable assurance.

The Final Chapter

Negative consequences of the stock option fraud weighed heavily on mSystems. On July 30, 2006, SanDisk, a U.S.-based company located in California, entered into an agreement to acquire mSystems through an exchange of stock [11]. Public announcement by mSystems of the accounting fraud had caused the technology-heavy firm to be an attractive target for acquisition. Just prior to the public knowledge of the fraud, mSystems’ stock was priced in the market at $37.60 per share. The price of the stock at the time of the merger announcement was $31.79, a decline in value of over 15% over a time period that spanned less than three months [3].

References
*mSystems Ltd. Form 20-F filed with the United States Securities and Exchange Commission for fiscal year ended December 31, 2005 provided a significant source of information that was used as a basis for this case and the tables presented.


Required Questions

1. What is an employee stock option (ESOP) and why is it important to a company? What is the grant date, the measurement date, and the vesting period? Over what period of time is the compensation expense allocated?

2. What is “backdating” of a stock option? When is it considered intentional or fraudulent? When is it considered as incidental negligence?

3. Why is the tax liability higher for mSystems when the compensation expense for ESOPs increased?

4. The identification of business risks faced by a company helps it to direct efforts to areas that need internal controls. What business risks is mSystems facing?

5. In regards to the risks for the backdating of stock options, what internal controls can mitigate that activity?

6. What audit procedures could be performed during the conduct of the external audit to uncover the backdating of stock options?