

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MBA – SEMESTER 4 • EXAMINATION – WINTER 2016**

**Subject Code: 2840008**

**Date: 21/10/2016**

**Subject Name: Technology & Business (T&B)**

**Time: 02:30 pm to 05:30 pm**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

**Q.1 (a) Answer the following multiple choice questions:**

**06**

1. Productivity is measured by:  
A. The growth in output of a firm      B. The growth in profits of a firm  
C. Total output/total input      D. Total amount of investment in capital goods
2. What type of commerce occurs when a business sells its products over the Internet to other businesses?  
A. B2B      B. B2C  
C. C2B      D. C2C
3. When two companies are linked together by computers and they send business transactions through these computers, they are probably using \_\_\_\_\_.  
A. RFID      B. Electronic data interchange  
C. B2C      D. Smart cards
4. If a university sets up a web-based information system that faculty could access to record student grades and to advise students, that would be an example of a/an  
A. CRM      B. Intranet  
C. Extranet      D. ERP
5. Which is not a typical business function?  
A. Sales      B. Service  
C. Benefits and Compensation      D. Manufacturing
6. What is the full form of IPR?  
A. Intellectual Property Rights      B. Intelligent Property Rights  
C. Internet Private Review      D. None of the above

**Q.1 (b) Define following terms briefly:**

**04**

1. Cookie
2. Counterfeit Software
3. Horizontal & Vertical Software
4. Outsourcing

**Q.1 (c) What do you mean by "Knowledge Management"? Discuss two types of knowledge in brief.**

**04**

**Q.2 (a) What do you mean by "CRM"? Explain different types of CRM. And also discuss successful CRM implementation strategy in the organization.**

**07**

**(b) What are the most important factors that you would use in evaluating computer hardware & computer software? Explain why? And explain different types of computer categories in brief.**

**07**

**OR**

- (b) What do you mean by “Porter’s Five Force Model”? Explain this model with example of any IT industry sector. **07**
- Q.3** (a) Explain in brief different kinds of technologies / KMS that firm can use to support its Knowledge Management infrastructure. **07**
- (b) One of the reasons for reluctance to the use of e-commerce is information security threat. Which are the various security threats to e-business? **07**
- OR**
- Q.3** (a) Short note on: Enterprise Resource Planning (ERP) **07**
- (b) “Business Intelligence (BI)” has become a primary requirement in business now days – Explain. **07**
- Q.4** (a) What do you mean by “ePolicies”, list down major ePolicies available for managing the information security & also explain any three ePolicies in detail. **07**
- (b) It is said that supply chains are essentially “a series of linked suppliers and customers; every customer is in turn a supplier to the next downstream organization, until the ultimate end-user.” Explain. Use of a diagram is recommended. **07**
- OR**
- Q.4** (a) Short note: Content Management Systems (CMS) **07**
- (b) What do you mean by Collaborative Partnership? What are the functions of a typical collaborative business? **07**
- Q.5** Discuss the case study with answers of following questions. **14**

#### **Thinking Like the Enemy**

David & Barry Kaufman, the founders of the Intense School, recently added several security courses, including the five-day “Professional Hacking Boot Camp” & “Social Engineering in Two Days”.

Information technology departments must know how to protect organizational information. Therefore, organizations must teach their IT personal how to protect their systems, especially in light of the many new government regulations, such as the Health Insurance Portability & Accountability Act (HIPAA), that demand secure systems. The concept of sending IT professionals to a hacking school seems counterintuitive; it is somewhat similar to sending accountants to an Embezzling 101 course. The Intense School does not strive to breed the next generation of hackers, however, but to teach its students how to be “ethical” hackers: to use their skills to build better locks, and to understand the minds of those who would attempt to crack them.

The main philosophy of the security course at the Intense School is simply “To know the enemy”. In fact, one of the teachers at the Intense School is none other than Kevin Mitnick, the famous hacker who was imprisoned from 1995 to 2000. Teaching security from the hacker’s perspective, as Mitnick does, is more difficult than teaching hacking itself. A hacker just needs to know one way into a system, but security professional needs to know *all* of the system’s vulnerabilities. The two courses analyze those vulnerabilities from different perspectives.

The hacking course, which costs \$3,500, teaches ways to protect against typically associated with hackers: worming through computer systems through vulnerabilities that are susceptible to technical, or computer-based, attacks. Mitnick’s \$1,950 social engineering course, by contrast, teaches the more frightening art of worming through the vulnerabilities of

the people using & maintaining systems-getting passwords & access through duplicity, not technology. People that take this class, or read Mitnick's book, *The Art of Deception*, never again think of passwords or the trash bin the same way.

So how does the Intense School teach hacking? With sessions of dumpster diving (the unsavoury practice of looking for passwords & other bits of information on discarded papers), with field trips case target systems, and with practice runs at the company's in-house "target range," a network of computers set up to thwart & educate students.

One feature of the Intense School that raises a few questions is that the school does not check on morals at the door: Anyone paying the tuition can attend the school. Given the potential danger that an unchecked graduate of a hacking school could represent, it is surprising that FBI does not collect the names of the graduates. But perhaps it gets them any how-several governmental agencies have sent students to the school.

**Questions:**

1. How could an organization benefit from attending one of the courses offered at the Intense School?
2. If your employer sent you to take a course at the Intense School, which one would you choose & why?

**OR**

**Q.5**

Discuss the case study with answers of following questions.

**14**

**Security Loopholes**

Utpal had just joined SystemX as Systems Manager. But he was a worried man looking at the current state of affairs at SystemX. As a part of assessing hardware and software requirements, it was found that out of the 364 desktops at the corporate office; more than half did not have their antivirus software updated with recent virus signature files. Three - fourths had not changed the default e-mail password (it was the user name) and no one had installed OS patches. And one of its local mail servers seemed to be an open relay! For a fleeting moment, he wondered about the situation at the seven branch offices across the country.

SystemX used the Net extensively in dealing with its branches, customers and suppliers. Information like contract documents, marketing plans, Cheque and Draft numbers, bank account details and collection details were regularly transmitted by e-mail. Utpal's first thought was that he would recommend that SystemX bring in a security consultant. But the budget constraints meant that his recommendation was unlikely to find favour. He was beginning to feel a bit out of depth and was wondering what he should do to ensure that SystemX's data remained safe and secure.

**Questions:**

1. What security loopholes come to the fore in the situation described? How can these be plugged?
2. What is the importance of a "security budget" in the context of the given situation?

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