National University of Science and Technology

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

FIRST SEMESTER FINAL EXAMINATION PAPER

DATE: **JANUARY 2013**

SUBJECT: **INFORMATION SYSTEMS: CAC 2104**

TIME ALLOWED: **THREE (3) HOURS**

TOTAL MARKS: **100**

INSTRUCTIONS TO CANDIDATES

1. Answer **ALL** QUESTIONS
2. Use the Answer book provided
3. Use black or blue pen
4. Begin each question on a new page and
5. Submit all answer books
6. Each question carries 20 marks

QUESTION 1

With reference to Porters Five Forces model critically analyse how information systems may contribute in the achievement of a competitive business strategy. **[20 marks]**

QUESTION 2

a) Simon (1960) described four stages in decision making. Discuss the process of decision making in an organization using this model. **[10 marks]**
b) Analyse the information requirements for different levels of management in an organization and their relationship. **[10 marks]**

QUESTION 3

Give a detailed outline of the systems development life cycle highlighting inputs and outputs for each phase. **[20 marks]**

QUESTION 4

ABC Wholesalers allocates discount to orders considering the following rules:

I f order value is greater than $5000.00 discount is offered at 20% for all account holders and 15% for non-account holders. If order value is less than or equal to $5000.00 but is greater or equal to $3000.00, account holders get 15% discount and non account holders get 10% discount. Orders less than $3000.00 but greater than $1000.00 attract 10% discount for account holders and 5% discount for non-account holders. For all orders greater than $1000.00 and accounts are older than 3 years, an additional 2% discount if offered .Any other order gets no discount.

Required:

With respect to systems design:

- **a)** Draw a decision table for the above scenario. **[10]**
- **b)** Draw a decision tree. **[10]**

QUESTION 5

Since its launch in the mid '90s, Dell's e-commerce business has been a poster child for the benefits of online sales, says Aberdeen Group analyst Kent Allen. The company's strategy of selling over the Internet -- with no retail outlets and no middleman -- has been as discussed, admired and imitated as any e-commerce model. Dell's online sales channel has proven so successful, says Allen that the computer industry must ask: "Does the consumer need to go to the store to buy a PC anymore?"

Regardless of the company's past success, Dell is affected by two current trends in e-commerce, says Forrester analyst Carrie Johnson. And only one of these trends works in the PC giant's favor.

The early adopters were always comfortable buying PCs online, she notes, but the general public has taken a while to catch up. "What we know about how consumers buy online is that they start with low-ticket, low-risk goods like books, and they eventually begin to trust the Internet more and graduate to higher end products like PCs and travel."

At this point, "Enough consumers have been shopping online for three or more years that they trust the Internet to buy almost anything," Johnson says. "Which is why you see apparel do so well now and even computers do so well, because it's not just the early adopters buying online now. We've caught the second wave of online shopping."

But while this trend bodes well for Dell, says Johnson, another does not: due to a slowdown in PC sales, what's fueling most of the online growth [in the PC market] at this point are second hand sales of computers. Auction sites like eBay and uBid are enjoying thriving growth rates in PC sales, she says, in contrast to new PC vendors like Dell. So the challenge for Dell now is figuring out how to grow sales in a tough market.

After six strong years of online sales -- widely regarded by analysts as stumble free -- Dell has racked up some impressive statistics. In the last quarter of 2002, Dell.com logged a billion page views, a company first. According to Dell spokesperson Bob Kaufman, about half of the company's revenue comes from the site, which means approximately $16 billion flowed through Dell.com in the last year.

A key part of Dell's success, says Aberdeen's Allen, is that the site offers consumers "choice and control." Buyers can click through Dell and assemble computer system piece by piece, choosing components like hard drive size and processor speed based on their budgets and needs.

"Their ability to allow people to custom design has traditionally been something that they're ahead of the game with, and a lot of people are slowly starting to catch up now," Allen says. "But they continue to be viewed as the leader."

This direct contact with consumers gives Dell a competitive advantage, explains Dell's McNair. "Because we know exactly what our customers are ordering, it's a 1-to-1 proposition. We get

feedback on how our site is working so we're constantly making tweaks to it to make the experience for our customers easier..." (Maguire 2003).

With reference to the above discuss different forms of e-commerce stating how organizations and clients have benefited from e-commerce.   **[20 marks]**

END OF EXAMINATION PAPER