THE OPEN UNIVERSITY OF SRI LANKA
COMMONWEALTH EXECUTIVE MASTER OF BUSINESS/PUBLIC
ADMINISTRATION
FINAL EXAMINATION – MARCH 2006
MCP 2601 – ELECTRONIC COMMERCE
DURATION : THREE (03) HOURS

Date: 25th March, 2006   Time: 9.30 a.m. 12.30 p.m.

PART I

ANSWER ANY FOUR (4) QUESTIONS -60 MARKS

01.   eCommerce and eGovernment:

i.   Define the two terms "eCommerce" and "eGovernment" and explain how
       they relate to each other.

ii.   What are the challenges in implementing eGovernment solutions in Sri
       Lanka? What are you propose to overcome such challenges?

02.   eCommerce:

i.   Briefly explain the terms *old economy* and the *new economy*.
       Did the new economy live up to its expectations? Elaborate.

ii.   Briefly explain different categories of eCommerce with a Sri Lankan
       example for each category.

03.   eCommerce Models:

i.   Specify the key features of the following eCommerce Models.
       a) Brokerage Model
       b) Advertising Model
       c) Infomediary Model

ii.   Briefly describe one (01) sub-model under each category given above and
       explain the functionalities of each sub-model by taking relevant Sri
       Lankan examples.

04.   eCommerce Frameworks.

     i.   Apply Porter's 5 forces model to "Auction" e-business model by taking ebay.com as an example.

     ii.   Apply Value Chain to "Generalised Portal" e-business model (under advertising model) by taking google.com as an example.

05.   Design an eCommerce portal for the Sri Lankan tourism industry by utilizing an appropriate eCommerce model and a framework.

06.   eCommerce Security:
     i.   Explain the key features of an Intranet and an Extranet.

     ii.   Explain and differentiate the symmetric key encryption and the public-private key (PKI) encryption mechanisms.

     iii.   What is SSL? Briefly explain its operation.

     iv.   Briefly explain the concept of a digital signature.

PART II

ANSWER ONE OF THE FOLLOWING CASES – 40 MARKS

07.   Case Study-Petrol:
Petrol is Slovenia's largest oil company, selling on average over 2.3 million tons of petroleum derivatives a year. Additionally, with over 2,200 different articles in stock at Petrol convenience stores, the oil company has already caught up with a number of medium sized retail companies in terms of revenue. This means that the supply of non-fuel merchandise in the convenience store area is also one of the most critical elements of the business, since non-fuel sales represent as much as 60% of total sales. Having both fuel and non-fuel merchandise as key revenue earners means Petrol's infrastructure is more complex than many other industries. Purchasing decisions are difficult to analyze and Petrol accommodates a very diverse range of products to increase customer loyalty. The General Manager, Petrol, comments: "Customers demand from Petrol outstanding products and services. To achieve this, the company identified the need to ensure the punctual, accurate and paper-free flow of information, while enabling the undisturbed and

uninterrupted supply of products according to demand. The complexity of the infrastructure in the past resulted in the paperwork being extensive and very resource intensive". Your task is to recommend an eCommerce solution to petrol. In your answer, suggest a business model and give special considerations to business, communication and security aspects.

08. Case Study-Sonera Oy:
Sonera Oy is the leading telecommunications operator in Finland, specializing in mobile, data and media communications. Sonera Oy offers mobile communications services to private and business customers. In Finland, a country with the highest density of mobile telephones in the world, Sonera Oy is the market leader with more than 70 percent of the market and about 1.8 million customers. As deregulation continues in the telecommunications sector, the company aims to take advantage of opportunities in international markets. The company is a pioneer in its field, with strengths in mobile, data and media communications. It was the first in the world to offer, for example, Internet access for mobile telephones and a service to integrate a company's telephone exchange with its mobile telephones. In 1997, Sonera Oy ranked third among Finnish companies in the number of patents it applied for, using about 3.5 percent of its net sales on research and development. Imagine the complex and demanding task of managing human resources within such a company, with over 8,000 highly skilled employees. For Sonera Oy, it was clear that it could only attain its ambitious growth and profitability targets if it could measure and analyze personnel competencies for all of its employees to ensure appropriate staffing for all of its projects. According to Vesa Taatila, competence director for the company's mobile communications division: "Within the mobile communications division, we were looking for a solution that would help us translate some unstructured, specialist knowledge into the sort of readily-digestible information that could be of use to the general management". Your task is to recommend a solution to Sonera Oy. In your answer give special considerations to business, communication and security aspects.