



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES**

**B.Sc. (Honors) Degree in Information Technology
B.Sc. (Four-year) Degree in Applied Sciences
Fourth Year - Semester I Examination – January/February 2021**

ICT 4306 – E-Commerce

Time: THREE (03) hours

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- Answer **ALL** questions.
 - This is a closed book examination.
 - This paper includes **THREE (03)** pages.
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1. a) Business models can be categorized based on methods that organizations earn their revenue. Briefly explain following revenue models. Give example for each model in the international/local business context.
 - i. Freemium model
 - ii. Subscription model
 - iii. Advertisement model

(09 marks)
- b) Usually e commerce systems have two types of disadvantages. Those types namely; technical and non-technical. Write two (02) disadvantages for each category.

(04 marks)
- c) There are four (04) ways which sell-side e-commerce websites use to market their products.
 - i. What are they? Explain them briefly. (08 marks)
 - ii. Give examples for each category in the Sri Lankan business context and International business context. (04 marks)
2. The COVID-19 pandemic has turned the entire lifestyle of the people of the Sri Lanka. Most of the businesses had to be limited to online sales. People were looking towards new approaches to do their regular businesses. Considering the scenario in the context of Sri Lankan clothing industry, answer the following questions.
 - a) Identify factors under each criterion of SWOT that have been affected to Sri Lankan clothing industry. Write two factors for each criterion. Justify your answers. (08 marks)
 - b) Suggest three (03) business models that would be suitable to increase the sales of clothing businesses in Sri Lanka. Explain how they can be applied to the clothing businesses. (06 marks)

- c) Explain how Virtual Reality and Augmented Reality concepts can be used with e-commerce applications in order to attract more customers. Give suitable example from clothing industry. (04 marks)
- d) E-Payment solutions can be classified by the time of payment. What are the categories of the classification? Which method(s) is/are suitable to be used in the situation given above? Justify your answer with example(s). (07 marks)
3. a) The AirWick Airlines owns a server which worth of 300,000 Rupees to host their official website and online air ticket booking system. The security experts of the organization have identified once the server is broken down due to any intruder's activity, 20% of their entire system will be disabled. And it is estimated that, this type of incident can occur once in two years.
- Calculate Single Loss Expectancy (SLE) and Annual Loss Expectancy (ALE) values. (06 marks)
 - The annual subscription for an intrusion detection system that is suitable for the above server is 100,000 Rupees. Is it worth to buy such an intrusion detection system rather than allowing any intruder's activity mentioned above happening? Justify your answer. (04 marks)
- b) What are the four (4) ways of treating security risks? Explain them briefly. (05 marks)
- c) As a non-technical security attack, the social engineering attacks are being rising in recent years. Many fake web sites have hosted in the internet to gather customer information in many ways.
- What is a social engineering attack? Explain how a social engineering attack can be happened. (06 marks)
 - Briefly explain two (02) social engineering methods. (04 marks)
4. Most people in this world have heard of eBay and Amazon.com, two U.S.-based online retail sites where one can typically find any desired product. The online shopping fever has spread to China in the form of companies like Taobao and JD .com. Taobao, owned by Alibaba, was founded in 2003 and only 8 years later had 370 million registered users, more than the entire population of the United States. If you have tried any of Taobao's services, you know that it has various branches. There's Taobao Marketplace, China's eBay, which dominates the country's online consumer-to-consumer e-commerce business with its 90 percent market share. Then there's Tmall.com, a separate site where renowned brands sell directly to consumers in a business-to-consumer manner. In fact, Taobao has fostered such a holistic shopping experience that international names like Gap, Adidas, and Levi's, just to name a few, decided to launch their own official online retail storefronts in the virtual mall. By 2014, Taobao, Tmall.com, and Juhuasuan (another Alibaba site for "flash sales") had more than 231 million active buyers and 8 million sellers and took 11.3 billion orders a year. On the Chinese "Single's Day" alone, the Alibaba Group recorded US\$9.3 billion in sales and shipped 278 million orders. However, shoppers should beware. Taobao might be the talk of the town, but it is also known as a notorious market for piracy and counterfeit goods. You may want to try out

JD.com instead (short for Jingdong Mall, formerly 360Buy) which has not made it to the list of notorious markets. The company is expanding fast, with an ambitious plan of solving logistics and delivery troubles that are a hallmark of the Chinese market, given the country's size and differences in population density. JD.com hopes to build a trucking fleet of close to 300 trucks and enter the logistics and distribution market, specifically to get rid of long-distance transport headaches. The greatest barrier to online shopping in China remains trust; within China, people fear being defrauded or receiving substandard products. Outside China, potential customers often face language barriers when attempting to communicate with the suppliers. While low-priced offers directly from Chinese suppliers may seem tempting, these factors can easily convince overseas consumers to turn to the more familiar Amazon.com or eBay.

Based on the given passage, answer the following questions.

- a) A combination of several e-business models is being used by the Taobao or JD.com. What are they?
(02 marks)
- b) Who are the competitors of Taobao and JD.com? How Taobao and JD.com have changed their e-commerce strategies to remain competitive in the global marketplace?
(06 marks)
- c) How does the increase of mobile devices change the competitive landscape for these companies? Explain.
(04 marks)
- d) What are the issues related to trust and fraud that Taobao or JD.com are met? How can these companies address the issues?
(06 marks)
- e) Suggest possible electronic payment models/methods that can be used by Taobao or JD.com.
(04 marks)
- f) Can Sri Lanka adopt such electronic payment methods? Justify your answer.
(03 marks)

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