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Universiti Tun Hussein Onn Malaysia

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER II  
SESSION 2022/2023**

- COURSE NAME : MANAGEMENT INFORMATION SYSTEM
- COURSE CODE : BPA 20703
- PROGRAMME CODE : BPB / BPC
- EXAMINATION DATE : JULY/ AUGUST 2023
- DURATION : 3 HOURS
- INSTRUCTIONS
1. ANSWER **ALL** QUESTIONS
  2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK**.
  3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

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**TERBUKA**

**Q1** (a) Businesses become more apt to use IoT technology to increase revenue, cut costs, improve efficiency, and give customers a better experience. The IoT has transformed sectors such as retails and e-commerce especially related to the logistics management, inventory, and supply chain management, as well as end customers. The adoption of IoT has become even more vital. The reason is changing lifestyles and constantly evolving corporate environments. IoT in retail and e-commerce is getting more popular due to the numerous benefits it provides to the sector. The technology aids in the analysis of client behaviour, the development of new business models, and the optimization of productivity.

(i) Discuss **TWO (2)** layers of IoT architecture with suitable technologies associated with each layer.

(6 marks)

(ii) Elaborate **TWO (2)** important benefits of using IoT technology in inventory management for retail industry. Provide an example from the existing technologies.

(8 marks)

(b) You have been hired by a small new web design firm to set up a network for its single office location. The network is primarily needed for exchanging files, accessing and managing beta websites on their web server, and connecting to the Internet. The firm hires many freelancers who come into the office on an ad-hoc basis.

Recommend the best suited network for the above situation if the company has limited investment spend on IT infrastructure.

(6 marks)

**Q2** (a) (i) Smartphones have been used in many business affairs to replace bulky computer sets. The technical capabilities of smartphones have been upgraded in addition to being mobile, making smartphones the main choice. However, smartphones are also exposed to security threats.

Discuss **TWO (2)** major security threats of mobile computing devices pose.

(6 marks)

(ii) Suggest **ONE (1)** authentication method that can be used for safeguarding the information in the smartphone with an illustration.

(6 marks)

(b) Several studies have shown the problems of data security in Cloud computing and risks that could threaten the security of datasets stored in the Cloud. Security can play an important role in the areas of Cloud computing and assuring datasets are properly protected by adopting effective security measures. Nonetheless, Cloud computing is one of the best options opted by the business. Cloud computing is safer and more secure computing environment than an in-house network.

Write your agreement or disagreement on the above statement. Based on the current e-business environment needs and customer experiences.

(8 marks)

**Q3** Starbucks is a company engaged in goods and services, which are more specific in Food and Beverage. Among the biggest coffee chain stores in Malaysia, Starbucks Malaysia has planned to expand the store at the urban and rural area to meet the customer demand. Meeting customer needs and making them satisfied with the goods provided under the label is the main goal of Starbucks. Currently, many competitors are present. Customers can freely choose what brand to choose to meet their needs. Basically, the customer will choose based on the quality of the goods provided, the price offered, and the service provided. With the trust that customers give to Starbucks, currently Starbucks already has 356 stores across Malaysia and will open about 40 new stores by June 2023. Alongside store expansion, Starbucks will also seek to enhance its Starbucks Rewards programme in the country by personalising rewards based upon its members' purchasing behaviour. Advanced digitalised ordering and payment methods will be implemented to enhance customers' experience, loyalty and frequency, and also to offer more card designs with attractive benefits for members.

(a) Analyse **TWO (2)** Customer Relationship Management System (CRMS) Strategies being implemented by Starbucks based on the above case to maintain their loyal customers. Relate your explanation with information such as loyalty program and Starbucks mobile apps.

(12 marks)

(b) Discuss **TWO (2)** benefits of the CRMS strategies analysed in **Q3(a)**.

(8 marks)

**Q4** E-commerce has deeply affected everyday life and how business and governments operate. Commerce is conducted in electronic marketplaces (or marketspaces) and in supply chains working on the Internet-Web. Consumer-oriented marketplaces include large e-malls (such as Amazon), consumer-to-consumer auction platforms (eBay, for example), multichannel retailers (such as L.L. Bean), and many millions of e-retailers.

(a) Elaborate **TWO (2)** issues that must be addressed when building an E-Commerce presence with examples for each issue.

(8 marks)

(b) Discuss **FOUR (4)** features that highlight adaptation of E-Commerce as different from non-E-Commerce.

(12 marks)

- Q5** Increased competitive pressure and the rising of big data need for data analytics, modern organizations tend to rely on knowledge and its exploitation to sustain a long-term advantage. This calls for a precise understanding of knowledge management (KM) processes and, specifically, how knowledge is created, shared/transferred, acquired, stored/retrieved, and applied throughout an organizational system. However, since the beginning of the new millennium, such KM processes have been deeply affected and moulded by the advent of the fourth industrial revolution, also called Industry 4.0, which involves the interconnectedness of machines and their ability to learn and share data autonomously.
- (a) Explain the **THREE (3)** key roles knowledge workers play in the era of Industry 4.0.  
(6 marks)
- (b) Explain **TWO (2)** of Knowledge Work Systems examples that can be applied in context of higher education institution to align with the needs of Industry 4.0.  
(6 marks)
- (c) Discuss **TWO (2)** benefits of using Intelligent Techniques for Knowledge Management.  
(8 marks)

-END OF QUESTIONS-

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