



UTHM

Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION (ONLINE) SEMESTER I SESSION 2020/2021

COURSE NAME : INFORMATION SECURITY MANAGEMENT
COURSE CODE : BIS 30503
PROGRAMME : BIS
EXAMINATION DATE : JANUARY / FEBRUARY 2021
DURATION : 3 HOURS
INSTRUCTION :
1. ANSWER ALL QUESTIONS
2. STUDENTS SHOULD UPLOAD ANSWER BOOKLET (PDF FORMAT) WITHIN 30 MINUTES AFTER EXAMINATION PERIOD

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THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

Q1 Based on case study in Figure Q1, answer the following questions.

By the early 21st century, Starbucks had a presence in dozens of countries around the globe and operated over 30,000 stores. It began selling food in its cafés in 2003. Schultz was replaced as CEO by Kevin Johnson in 2016 and as chairman by Myron Ullman in 2018. The world's largest Starbucks, a Starbucks Reserve Roastery, opened in Chicago in 2019.

FIGURE Q1

(a) Propose a solution for each technical detail of access control categories according to the business in food and beverage services

(12 marks)

(b) In your opinion, which access control model is suitable based on your answer in Q1(a)?

(5 marks)

(c) Justify your answer in Q1(b).

(6 marks)

Q2 Based on case study in Figure Q2, answer the following questions.

Using Internet of Things (IoT) devices across enterprises, healthcare and industrial applications delivers productivity benefits, but it also exposes you to new cyber threats.

FIGURE Q2

(a) List **FOUR (4)** examples of (full name) IoT devices for healthcare industry.

(4 marks)

(b) Draw a network architecture with firewalls for healthcare IoT environment.

(12 marks)

Q3 Based on case study in Figure Q3, answer the following questions.

In September, an attack hobbled all 250 US facilities of the hospital chain Universal Health Services, forcing doctors and nurses to rely on paper and pencil for record-keeping and slowing lab work. Employees described chaotic conditions impeding patient care, including mounting emergency room waits and the failure of wireless vital-signs monitoring equipment.

FIGURE Q3

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(a) Describe **FIVE (5)** information assets. (10 marks)

(b) Describe **FOUR (4)** possible database attacks. (8 marks)

Q4 Develop a Bring Your Own (BYOD) devices policy with cryptography element for maintaining the confidentiality and integrity of an organization (15 marks)

Q5 Suggest **FOUR(4)** methods of delivering the Security Awareness Program to high school students. Justify your answer. (8 marks)

-END OF QUESTIONS-

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