



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION (ONLINE) SEMESTER II **SESSION 2019/2020**

COURSE NAME

: INFORMATION SECURITY PROJECT

MANAGEMENT

COURSE CODE

: BIS 30703

PROGRAMME CODE : BIS

EXAMINATION DATE : JULY 2020

DURATION

: 2 HOURS

INSTRUCTION

: 1. ANSWER ALL QUESTIONS.

2. PLEASE MAKE SURE TO UPLOAD REOUESTED MATERIALS AND CLICK "SUBMIT" BUTTON WITHIN 30

MINUTES

AFTER

EXAMINATION PERIOD.

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

CONFIDENTIAL

TERBUKA

CONFIDENTIAL

BIS 30703

- Q1 You have been selected as one of the team members for a mobile health application (m-Health app) development project of the Guardian Pharmacy. In addition to the e-commerce modules, the app is collecting customers personal information and analyze their purchasing pattern. Your role as a Head of Secure Software consultant who responsible to plan the integration of security controls into software development phases. A secure software development model from the National Institute Standards and Technology (NTST) has been selected that includes Design, Development, Testing, Operations and Maintenance, and Disposal phase
 - (a) Describe **THREE** (3) properties of a secure software with **ONE** (1) example for each of the property in the context of Guardian Pharmacy m-Health app.

(6 marks)

(b) Illustrate a Gantt Chart of the Guardian Pharmacy m-Health app that include the NIST secure software development model.

(10 marks)

(c) Illustrate a Program Evaluation Review Technique (PERT) chart for the development phase that is consistent with the NIST Secure Software Development Model.

(8 marks)

(d) Covid-19 outbreak has affected the timeline of development phase in Q1(c). Describe TWO (2) contigency plans for each of the element of Triple Constraint model.

(6 marks)

- (e) Discuss **TWO** (2) potential security risks for each of the element of STRIDE model in the context of the Guardian Pharmacy m-Health app.

 (12 marks)
- (f) Discuss SEVEN (7) approaches of secure coding to mitigate data breach threats to the Guardian Pharmacy m-Health app.

(14 marks)

TERBUKA

Q2 Outline a Work Breakdown Structure diagram for UTHM Student Information System development based on Figure Q2.

(4 marks)

UTHM Student Assessment System

- I Hardware:
 - 1. Server
 - 2. Desklop
 - s. Mubile
- 2. Software:
 - 1. Operational system
 - ? Application
- 3. Nelwork:
 - 1. Cabling (control A.11.2.3 Cabling security)
 - 2. Wireless communication
 - 3. Remote access
 - 4. Roulers
 - Network segregation (control A.13.1.3 Segregation In networks)
 - 1. Define network perimeters
 - 2. Define network traffic rules
 - 2. Data:
 - 1. System data
 - 2. User data
 - 3. Organization data
 - 4. Information classification (control A.8.2.1 Classification of information)
 - 1. Define Information Classification Policy
 - 5. Inventory of Assets (control A.8.1.1 -Inventory of assets)
 - 1. Define assets categories
 - Assets owners (control A.8.1.2 -Ownership of assets)
 - 1. Define assets owners
 - 2. Define owners responsibilities
 - 3. Asset classification (control A.8.2.1 Classification of information)
 - Define systems classification according to the highest classified information processed by the system

FIGURE Q2

- END OF QUESTIONS -

TERBUKA