



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
(ONLINE)
SEMESTER I
SESSION 2020/2021**

COURSE NAME : INFORMATION SECURITY
PROJECT MANAGEMENT
COURSE CODE : BIS 30703
PROGRAMME CODE : BIS
EXAMINATION DATE : JANUARY / FEBRUARY 2021
DURATION : 3 HOURS
INSTRUCTION : 1. ANSWER ALL QUESTIONS.
2. PLEASE MAKE SURE TO
CLICK "SAVE ANSWER"
BUTTON FOR SUBJECTIVE
QUESTIONS. OBJECTIVE
QUESTIONS ARE SAVED
AUTOMATICALLY.

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

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Answer ALL questions.

- Q1** (a) Differentiate the following threat with example.
- (i) Hacking and hacktivism (3 marks)
 - (ii) Cyberwar and cyber espionage (3 marks)
- (b) A dollar spent upfront in planning is worth one hundred dollars spent after the system is implemented.
- Illustrate **THREE (3)** consequences based on the project's constraints where the above statement is proved correct (6 marks)
- (c) How do you balance your decision to opt for escalation to avoid wolf cry scenario. Give **TWO (2)** considerations (4 marks)
- (d) Differentiate between administrative closure and contract closure (4 marks)

Q2 A well known e-commerce company, Merchandisehere.com has few occurrences of security breaches concerned the CIO. However, he need to persuade the Board of Directors to invest in securing the company. Security spending is looked as a giant black hole where money goes in and nothing comes out. Therefore, he need a proper tool to convince the board before he can proceed with the proposal. He ask his Security Consultant to prepare the details. The network is centralized in the headquarters. The consultant estimates that the company has been suffering about 10 security incidents per year for the last three years. The cost of a single security breach is estimated at \$23,000 in data loss, fine, and productivity. The proposed solution is projected to block about 85% (mitigation ratio = 90%) of the attacks. The security cost per device is estimated at \$300 per year. The company has 100 device network. The cost for security software, implementation, management and personnel is estimated to be \$80,000 per year.

Based on the given scenario, answer the following questions.

- (a) Give **THREE(3)** reasons the importance in addressing the security breaches despite of the high cost. (6 marks)
- (b) Propose **THREE (3)** factors in planning the cost of security. (6 marks)

- (c) Calculate the cost of security for Merchandisehere.com. (2 marks)
- (d) Prepare Return of Security Investment (ROSI) for Merchandisehere.com. (4 marks)
- (e) Conclude your answer in Q2(d). (2 marks)

Q3

You are managing a security project to develop a new network setup with a secure communication for OfficeAll.com, a distributor for stationary and books. The Director decided to expand the business with the opening of new branch in Melaka. You are currently performing a monitoring and controlling project activity, and you have discovered that some of the project work has not been performed according to the plan. The network consultant has to leave the company due to personal problem. There is no other staff that can handle the network implementation. Then, it being reported that there are some issues in handling data being shared and transferred within the business. They are not yet checked to comply with Health Insurance Portability and Accountability Act of 1996 (HIPAA). With a very tight budget, you need to fix the problem. In addition to the current issue, one of the key stakeholders make a change request to one of the modules in the project. The request is regarding a module that is not in the original specification but vital to ensure the successful of the project.

Based on the given scenario, answer the following questions.

- (a) Determine a suitable management style for OfficeAll.com. (2 marks)
- (b) Give **FOUR (4)** reasons why your answer in Q3(a) is much more suitable for OfficeAll.com compared to the other style. (10 marks)
- (c) Justify **THREE (3)** constraints that will delay the project. (9 marks)
- (d) Determine **FOUR (4)** ways of making decision regarding the change request in original specification by stakeholder. (6 marks)
- (e) Decide either you accept or not the change request. Justify your answer. (3 marks)

Q4 ComNet.com is a company tendered to provide communication service to the government department in Putrajaya. It is a three floors building situated in Cyberjaya. Comnet is responsible to provide communication means and maintenance to all the government building. Since the communication is one of National Critical Infrastructure (CNI), the Board decided to enhance the security for Com.Net. The Board has hired a security consultant to assess the company security. From the report, the consultant advise the company to look into a way to secure communication for certain department within the company itself. A breach in this organization will jeopardized the secrecy and confidential data of the government. The wireless service should also be secured to prevent any interception from the outsiders. However, ComNet.com should not ignore the threats that come within the company. They need to enforce access control to certain systems and infrastructures. The data center should be secured physically and logically. The management of the company concerned about the security of the service department due to many confidential data and information passing through in here. Therefore, a work on backup or redundancy is crucial. Assuming you are assigned as a project manager to improve the security of the department. However, after quick observation you have noticed that the security should not only cover the department but the whole three floors building. The main tasks of the project are to hardoning the communication, the database system and the physical security.

Based on the given scenario, answer the following questions.

- (a) Illustrate Individual Security Area Project (ISAP) for ComNet.com using a diagram. (4 marks)
- (b) Prepare Work Breakdown Structure (WBS) for the project. (6 marks)

- END OF QUESTIONS -

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