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MAIN EXAMINATION

JANUARY – APRIL 2020 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER AND LIBRARY SCIENCE

REGULAR PROGRAMME

CMT 446: INFORMATION SYSTEMS AUDIT

Date: APRIL 2020

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. a) i) Discuss the **THREE** steps that organizations have to consider when determining the overall consequences of a risk **(3 Marks)**
- ii) IT managers uses COBIT for the best practice framework in IT management created by the Information systems audit and control association (ISACA), Identify the **TWO** main goals of the COBIT frameworks **(2 marks)**
- iii) While performing IS audit of an organization, IS auditor needs to carefully examine various Internal controls processes which are designed to provide reasonable assurance regarding the achievement of objectives in an organization. What are these **FOUR** objectives that internal control was designed to achieve? **(2 Marks)**
- b) i) A risk-based audit approach is usually adopted to develop and improve the continuous IS audit process. What are the **THREE** project estimation risk factors? **(3Marks)**
- ii) IS Auditors uses Computer Assisted Audit Techniques (CAATs) tools which are important for IS audit performance, identify these **FOUR** tools used to perform audit procedures **(2 Marks)**

- iii) Explain **THREE** reasons as why risk management is important
(3Marks)
- c) i) State **THREE** objectives of auditing the outsourced IT functions.
(3 marks)
- ii) System development life cycle (SDLC) approach doesn't guarantee successful completion of IS development project. This involves a magnitude of risk that needs to be controlled. State **FOUR** responsibilities of IS auditor to control risks of inadequate system development life cycle.
(2 marks)
- iii) IS Auditors are required to apply general controls which are overall controls that ensure the effective operation of programmed procedures. State the **SIX** general control application areas.
(3Marks)
- d) i) Organizations uses access control to ensure that the entire set of procedures performed by hardware, software and administrators, to monitor access, identify users requesting access, record access attempts, and grant or deny access based on pre-established rules. Explain the **THREE** major aspects of data Access Control
(3 Marks)
- ii). Differentiate between **Discretionary Access Control** and **Mandatory Access Control**
(2 Marks)
- iii) Explain any **TWO** ways on how to perform the IT gap analysis
(2 Marks)
- Q2. a) COBIT 5 is a framework from the Information Systems Audit and Control Association (ISACA) for the management and governance of information technology (IT).By the use of a diagram discuss the **FIVE** principles of COBIT 5 framework.
(5 marks)
- b) Briefly discuss **FIVE** Audit procedures to control test data applications
(5 marks)
- c) Describe **FOUR** security program components
(4 marks)
- d) Explain the **SIX** compensation controls that are intended to reduce the risk existing or potential control weakness when duties cannot be appropriately segregated
(6 marks)

- Q3. a) While performing IS audit of an organization, IS auditor needs to carefully examine various IS controls implemented by the organization. Discuss the **THREE** functions of the internal control **(6 Marks)**
- b) When using a CAAT, the IS auditor may require the cooperation of entity staff with extensive knowledge of the computer installation. In such circumstances, the IS auditor considers whether the staff improperly influenced the results of the CAAT. Discuss **FOUR** Audit procedures to control the use of audit-enabling software. **(4 marks)**
- c) If the Risks become real, it is likely that the Project Schedule will slip and that Project Cost will increase. Discuss at least **FOUR** Project risk components **(4 marks)**
- d) Business Continuity Plans should be maintained regularly, discuss **FIVE** maintenance activities required **(6 marks)**
- Q4. a) The IS auditor should be familiar with different steps to be performed in carrying out an application software audit review. Discuss the **SIX** steps **(6 marks)**
- b) When planning the audit, the IS auditor should consider an appropriate combination of manual techniques and CAATs. Discuss the **SIX** steps to be undertaken by the auditor in the application of a CAAT **(6 Marks)**
- c) Information security program is the set of controls that an organization must govern. It is important to understand that a security program has a continuous life cycle that should be constantly evaluated and improved upon otherwise inconsistent efforts open the organization to increased risk, Explain the **FOUR** steps in the information security program life cycle **(4 Marks)**
- d) As the IS auditor, you have been assigned to evaluate the controls and operations of Organization's system. To test the systems, you submit independently created business continuity plan test with regular data in a normal production run. Explain **FOUR** weaknesses of this technique. **(4 marks)**

- Q5. a) COBIT 5 helps enterprises create optimal value from IT by maintaining a balance between realizing benefits and optimizing risk levels and resource use, explain **FIVE** components of Cobit **(5 marks)**
- b) IS Auditors uses application controls which transactions and data is related to each computer-based application system and are, therefore, specific to each such application. Explain the **THREE** benefits of application Controls **(6 marks)**
- c) Discuss **FIVE** reasons why there is a need for IS Control and Audit **(5marks)**
- d) Many IT dependent companies rely on the Information Technology in order to operate their business, discuss **FOUR** primary objectives of an IT audit include. **(4 marks)**

END