

# **Faculty of Computing and Informatics**

# **Department of Computer Science**

QUALIFICATION: Bachelor of Computer Science	e
QUALIFICATION CODE: 07BACS	LEVEL: 6
COURSE: Systems Audit	COURSE CODE: SAU620S
DATE: November 2022	SESSION: 1
<b>DURATION:</b> 2 hours 30 minutes	MARKS: 100

FIRST O	PPORTUNITY EXAMINATION QUESTION PAPER	
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# THIS QUESTION PAPER CONSISTS OF 6 PAGES

(Including this front page)

# **INSTRUCTIONS**

- 1. Answer ALL the questions.
- 2. Write clearly and neatly.
- 3. Number the answers clearly.
- 4. When answering questions you should be guided by the allocation of marks. Do not give too few or too many facts in your answers.

### SECTION A: True/False. (5 marks)

Choose the correct option.

- 1) High-level and detailed generic statements of minimum good control are known as control objectives. TRUE/FALSE
- 2) Code of ethics define mandatory requirements for IS auditing and reporting. TRUE/FALSE
- 3) The "Assessment" phase in the IT audit process involves defining the audit scope, objectives and internal control questionnaire. TRUE/FALSE
- 4) The ITIL framework is directed specifically toward service management, a part of that is, itself, directed toward the governance of service delivery. TRUE/FALSE
- 5) Patents refer to Intellectual Property rights to design or expression that distinguishes a product/service. TRUE/FALSE

#### **SECTION B: Select the correct option. (5 marks)**

- 1) Which of the following is not a component of COSO's defined internal control standards in providing assurance to achieving business objectives ?
  - a) Sound Control Environment
  - b) Sound Risk Assessment Process
  - c) Sound internal Control Activities
  - d) Sound Information and Communications Systems
- 2) Basic concerns or risks in On-Line Transaction Processing (OLTP) system would include all the following except.
  - a) Accuracy
  - b) Dependability
  - c) Security
  - d) Unauthorized access

3. Which of the follow	ing is not an objective	of internal controls?

- a) Compliance with Policies and Regulations
- b) Reliability and Integrity of Information
- c) Safeguarding of Audit Personnel
- d) Effectiveness and Efficiency of Operations

4.	The transfer of structured data, by agreed message standards, from one computer system
to	another without human intervention is known as

- a) CoSo
- b) PCI
- c) EDI
- d) MST

5. ..... define mandatory requirements for IS auditing and reporting.

- a) Guidelines
- b) Standards
- c) Policies
- d) Procedures

SECTION C: (90 marks)

# 1. Introduction to Systems Audit [10 Marks]

- a) What are the primary objectives of IS Auditing? [5 Marks]
- b) State three professional certifying bodies/organisations for IS auditors. [3 Marks]
- c) Name two primary control objectives of early batch systems. [2 Marks]

# 2. IT Audit Process: Technology and audit [21 Marks]

a) Engagement planning is an essential component which ensures a successful audit and achieving flexibility in identifying control objectives and risks. Briefly explain three tasks involved in the engagement planning phase. [3 Marks]

- b) According to NIST SP 800-39, risk management is classified at 3 levels, what are the three levels of security risk in the Information Technology (IT) function? [3 marks]
- c) The audit program provides for the collection of what audit evidence? [3 Marks]
- d) Define IS Auditing, and in chronological order, name and briefly explain the four main stages in an IT audit process. [10 Marks]
- d) List and explain two internal control types. [2 Marks]

### 3. Standards and Guidelines for IS auditing [13]

- a) The framework for the IT auditing standards provides multiple levels of guidance, that is, standards, guidelines and procedures. Briefly define the three levels. [3]
- b) Name two Standards or Guidelines for IT Auditing. [2 Marks]
- c) When conducting IT risks analysis, what are the possible sources of threats? [3 Marks]
- d) Information Systems Auditors are required to sign an ethics code of conduct. Briefly define code of ethics and state why it is important to you as an IS Auditor. [3 Marks]
- e) What is the objective of the IS Auditing Guidelines? [2 Marks]

#### 4. Information systems/information technology governance [9 Marks]

- a. Briefly define project lifecycle and list two project lifecycle models. [3 Marks]
- b. CoCo is an Audit body Intended to translate COSO controls into practical, implementable activities. State four ways in which CoCo promotes the treatment of IS risks. [4 Marks]
- c. The Payment Card Industry Security Standards Council developed a set of standards to encourage cardholder data security and facilitate the adoption of consistent data security measures on a global basis. State two directives defined by the standard. [2 Marks]

### 5. Audit and development of application controls [5 Marks]

- a) What are some of the problems associated with the use of CAATS? [2 Marks]
- b) Each database in IDEA has several properties associated with it; which are accessible from the Properties window. List and explain one property of your choice. [2 Marks]
- c) State the importance of Audit trails in IS Auditing. [1 Mark]

#### 6. Information Technology Service Delivery and Support. [10 Marks]

- a) Briefly define a Service-Level Agreement (SLA) and state three objectives. [4 Marks]
- b) Which type of auditing permits auditors to monitor an organization's systems using appropriate sensors and digital agents? [1 Mark]
- c) Define change control and state its' core objective. [3 Marks]
- d) As an IS Auditor, state any two tasks that needs to be carried out when auditing a change control. [2 Marks]

#### 7. Auditing UNIX and Windows. [13 Marks]

- a) Define password shadowing and state the benefit of implementing it [3 Marks]
- b) Passwords are vulnerable to which attacks? State three [3 Marks]
- c) When does it become absolutely necessary to store encrypted passwords on both UNIX and Windows platforms? [2 Mark]
- d) Give any three examples of UNIX daemons. [3 Marks]
- e) Give two aspects the systems administrator should check for problem areas on a random basis. [2 Marks]

# 8. Investigating IT fraud [9 Marks]

- a) What constitutes a forensic response toolkit? [2 Marks]
- b) State the difference between Browser hijacking and SQL injection [4 Marks]
- b) In relation to IS Auditing, state three reasons why cyber fraud prosecution fails? [3 Marks]

[THE END]