**CHUKA**                                                                    **UNIVERSITY**

# UNIVERSITY EXAMINATIONS

## FOURTH YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION ARTS

**COSC 476: INFORMATION SYSTEMS AUDITING**

**STREAMS: BSC (COMP SCI)**                                    **TIME: 2 HOURS**

**DAY/DATE: TUESDAY 14/04/2020**                        **2.30 PM – 4.30 PM**

**INSTRUCTIONS:**

**Answer question ONE and any other TWO questions.**

## QUESTION ONE { 30 MARKS }.

a) Explain software process maturity, hence discuss the five levels of software process maturity.                                                                    ( 7 marks )

b) Describe the three high - level phases which are key inclusion during the process of writing an information system audit report.                            ( 6 marks )

c) Explain the following terms used in information system auditing process:   ( 5 marks )

   i.     Assurance engagement
   ii.    Audit charter
   iii.   Audit engagement
   iv.    Independence
   v.     Supra system

d) Discuss three categories of information system audit tools and methods.   ( 6 marks )

e) Outline the procedure of establishing information security management framework in accordance to ISO 27001 –(BS7799 : Information Security Management Standard (ISMS);  ISO AUDIT STANDARDS.                                             ( 6 marks )

**QUESTION TWO {20 MARKS}.**

a) Discuss the five attributes of an audit finding                    ( 10 marks)

b) Highlight four key addressable areas required by I T A F Standard 1201 engagement planning phase that requires each IS audit and assurance professionals to plan.  (4 marks)

c) A firewall is a collection of components that mediate access between different security domains, state two of these components  and give two examples of a firewall.  ( 2 marks )

d) Explain the role and implications of information system in managing an enterprise.
                                                                    ( 4 marks )

**QUESTION  THREE  { 20 MARKS }.**

a) Your audit team has been mandated to conduct an information system audit project that involves financial reporting. Discuss the main examinable elements to include in your review checklist that would ease identification of relevant I T controls for ICFR.
                                                                    ( 8  marks )

b) Discuss the statement using four application area  "Where information system and  audit meet "                                                         ( 8 marks)

c) Discuss two substantive procedures used during internal control testing stage of  information system audit:                                           (4marks)

**QUESTION  FOUR   { 20 MARKS }**

a) Discuss four main challenges encountered by information system auditors.    ( 8 marks )

b) Explain the challenges to Information system auditing presented by the internet.

                                                                    ( 6 marks )

c) With help of a well labelled diagram, describe how auditors should visualize computer systems.                                                       ( 6 marks )

**QUESTION  FIVE   { 20 MARKS }**

a) Explain the concept of  business continuity planning in an organization.       ( 2 marks )

b) Discuss the goals and objectives of business continuity in a given organization.  ( 6 marks)

c) Describe the main audit features necessitated by  audit of a disaster recovery or business resumption plan.                                    ( 8 marks )

d) Outline four main areas of focus by Information Security Management Standard(ISMS) in an organization.                                    ( 4 marks )

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