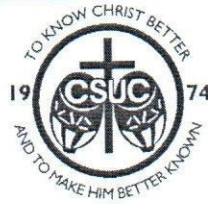


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CHRISTIAN SERVICE UNIVERSITY COLLEGE  
KUMASI, GHANA  
FACULTY OF HEALTH AND APPLIED SCIENCES  
DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY  
BACHELOR OF SCIENCE IN COMPUTER SCIENCE  
END OF SECOND SEMESTER EXAMINATIONS – 2021/2022 ACADEMIC YEAR

LEVEL 300

CSCP 352 INTRODUCTION TO COMPILERS

MAY 2022

SECTION B (30 Marks)

Time Allowed: 1 Hour 15 Mins

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GENERAL INSTRUCTION TO CANDIDATES:

*Questions in this Sections are to be answered in the answer booklet provided.*

*Time allocated is 75 Minutes.*

*Answer Question One and any other one questions in this Section.*

*All questions carry equal marks.*

*Examiner: Emmanuel Kwesi Baah*

**SECTION B (30 Marks)**

*Answer question One and other one (1) questions from this section.*

**Question One (15 marks)**

- a. Differentiate between *tokens*, *patterns*, and *lexeme*. (2 marks)
- b. List the various phases of a compiler. (4 marks)
- c. What are the two parts of a compilation? Explain briefly. (6 marks)
- d. Depict diagrammatically how a language is processed. (3 marks)

**Question Two (15 marks)**

- a. Define a context free grammar. (2 marks)
- b. Explain briefly the concept of *derivation*. (6 marks)
- c. Why are lexical and syntax analysers separated out? (4 marks)
- d. Mention the properties that a code generator should possess. (3 marks)

**Question Three (15 marks)**

- a. Define symbol table. (2 marks)
- b. What are the classifications of a compiler? (3 marks)
- c. Explain the issues to be considered while applying the technique for code optimization. (6 marks).
- d. Mention the back-end phases of a compiler? (4 marks)

*Examiner: Emmanuel Kwesi Baah*