



# Course Work Answer Book

## UNIVERSITY COURSE WORK

Semester 2

Date of Course Work *Sun Sep 01 2024 16:08:33 GMT+0300 (East Africa Time)*

1. Leave margin blank.
2. Begin each answer on a fresh page.
3. Write the number of each question and the Candidate's Number at the top of each page.
4. Write the numbers of the questions which you have attempted, with subsections where necessary, in the spaces provided below

<b>FOR USE BY EXAMINERS ONLY</b>		
<b>Question Number</b>	<b>Internal Examiner</b>	<b>External Examiner</b>
<b>TOTAL</b>		

**NUMBER OF QUESTIONS** you have answered in the order in which you have written them

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**How and where should I submit my Course Work script?**

Every student will be required to submit their Course Work via [VClass Students Portal](https://vclass.vu.ac.ug) E.g. you go to [www.vclass.ac](https://www.vclass.ac) and login, to your account, then on the left sidebar menu **click on Course Work**.

Under Course Work you will see the following: -

- a) Instructions for that particular Course Work with time required to finish your Course Work as per instructions,
- a) A student will be required to download the question paper and the answer sheet provided by the university within the same module Course Work, or a student can be required to attempt structured questions within the system depending on how the Course Work was set.
- b) Submission of answered questions is done,
- c) Student is required to click to **consent** to show that the answered Course Work belongs to them.
- d) **Note** that if Course Work is for download, a student will be required to download the question paper and answer sheet, do their Course Work within the given stipulated time.
- e) Required to scan and upload back the answered booklet through the same portal as per format available.
- f) Course Work uploaded will directly be received by the Registry department.
- g) Students here are required to use [VClass e-Learning system](#) for all Course Work and for any failure they can contact the Registry department for guidance.
- h) No late submission will be accepted.

**Avoid any malpractice because this will attract severe penalties such as invalidating the answered script whose consequences will attract retakes.**

**LWERE PAUL**

**VU-BIT-2301-0213-EVE**

Brief report summarizing my results and the methodology I used to conduct the simulation:

**i. Objective:**

To simulate the checkout process for an e-commerce store to determine the average time customers spend in the system and the proportion or percentage of time the checkout clerk is idle.

**ii. Methodology:**

- Interarrival and service times were used as the uniform random variables between (1, 15) and (1, 8) minutes, respectively.
- Simulated for 20 customers for 3 hours.
- Used Excel's Data Table to run 50 replications of the simulation which based on Interarrival Time where one of the cells was taken as the reference to link the model to the data table to ensure success of the 50 replications.

iii. The average time customers spent in the system ( $W$ ) = 5 Minutes.

iv. Percentage of time the checkout clerk was idle = 52 Minutes.