



12 Tudalen

Cyfarwyddiadau i Ymgeiswyr

1. Rhwngch yr holl wybodaeth y gofynnir amdani yn y blychau isod.
2. Rhwngch eich enw yn y lle a ddarparwyd ar y dde, plygwch ef a'i selio i lawr (gan ddefnyddio'r label a ddarparwyd) i guddio'ch enw.
3. Rhaid i'r atebion fod mewn llawysgrifen ddarlennadwy. Gall yr Arholwyr naill ai anwybyddu sgrïpt annarlennadwy, neu drefnu iddi gael ei theipio a chael yr ymgeisydd i dalu.
4. Ysgrifennwch eich atebion mewn inc.
5. Dechreuwch bob ateb ar dudalen newydd. Gwnewch unrhyw fras nodiadau yn y llyfr atebion a thynnu llinell drwyddynt.
6. Ni ddylid rhwygo unrhyw ran o'r llyfr hwn; rhaid ei gyflwyno yn gyfan.
7. Os defnyddir mwy nag un llyfr, rhwymwch hwy gyda'i gilydd gan ddefnyddio'r tagiau sydd ar gael oddi wrth y gwyliwr/gwylwyr.
8. Rhaid dychwelyd pob llyfr. Ni chaniateir mynd â llyfrau atebion, wedi eu defnyddio neu heb eu defnyddio, allan o'r lleoliad arholi o dan unrhyw amgylchiadau.

1	Rhif Myfyriwr	
2	Teitl y Papur Arholiad	
3	Cod y Modwl	
4	Dyddiad ac Amser yr Archoliad	
5	Lleoliad yr Arholiad	
6	Rhif Sedd	
7	Nifer y Llyfrau Atebion a gyflwynwyd	

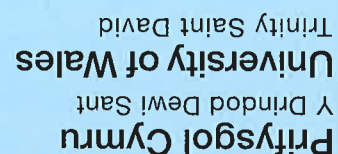
(See the other side for English version)

[illegible]

**Llenwch, plygwch a seliwch
(gweler nodyn 2 isod)**

CYFENW:

ENW(AU) CYNTAF:



Examination Answer Books

12 Pages

Instructions to Candidates

1. Please give the information requested in the boxes below.

2. Enter your name in the space provided to the right, fold over and seal down (using the label provided) to hide your name.

3. The answers must be legibly written. The Examiners can either ignore illegible script or have it typed and the expense of typing charged to the candidate.
4. Write your answers in ink.

6. No part of this book is to be torn out; it must be handed in complete.

7. If more books than one are used, fasten them together using the tags available from the invigilator(s).

8. Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.

1	Student Number	2221734
2	Title of Examination Paper	Computer Architecture
3	Module Code	ACCA4022
4	Date and Time of Examination	5/1/23 10:00 am
5	Examination Venue	Qay
6	Seat Number	
7	Number of Answer Books handed in	

(Gweler yr ochr arall am y fersiwn Cymraeg)

Office Use	List the numbers of the questions you have attempted	Total
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Complete, fold and seal
(see note 2 below)

SURNAME: KHAN

FORENAME(S): CAMRAN

estiwu

9

cpu ram X
memory Flash Drive RAM
input device microphone mouse
output monitor

Question two

1 4 1

✓ $V \cdot A6D9 = 1010 \ 0110 \ 1101$

$$a \begin{pmatrix} 1110 & 1010 & 0010 & 0101 \end{pmatrix} = EA25$$

101 7

$$B \quad 290 = 010 /$$

a ~~011~~ 011/101/001/011/110
3 5 1 3 2
= 35132

!

263

a

Question one

1	1	1	0	0	0	0	0	1
7	2	4	8	16	32	64	128	256

12

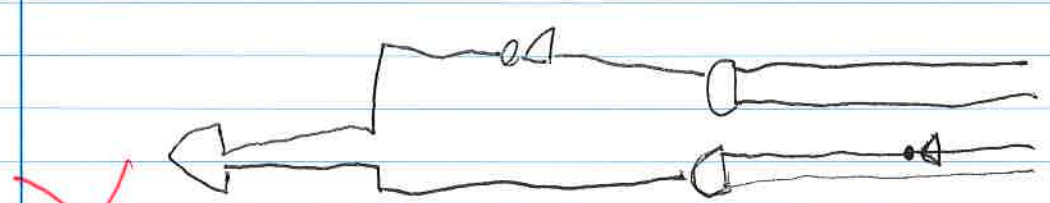
e Storage Device Flash Drive

f communication device ~~Gamepad~~ Ethernet port

Question Three

Question Four

$Q = (A \cdot B) + (C \cdot B)$



Question Five

5

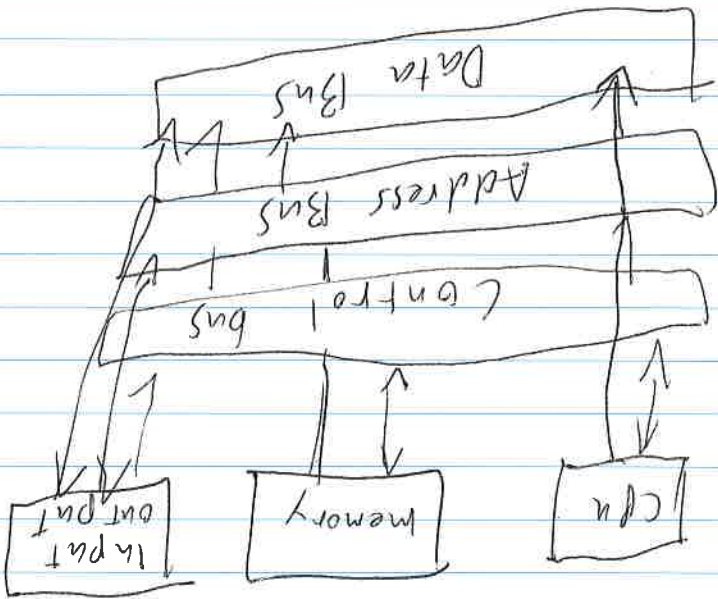
1 Splits data evenly across two or more disks for parallel storage and retrieval

2 Rway used practice splits data the bit Data divided into byte units and wiring

Question SIX

7

a bus is a high speed internal connection
Buses are used to send control signals and
data between the processor and other components



bus

Carries memory from the process to other
components such as primary memory and
input and output and carries ~~control signals~~
the actual data between the processor and
other components

Question Seven

10

Von Neumann Architecture

- 1 Based on the stored program concept
- 2 Uses the same physical memory address for instructions and data
- 3 means the system will be less costly
- 4 Instruction fetches and data transfers cannot be performed at the same time
- 5 used laptop / ~~personal~~ computers

- Examiner Only
Question No.

Examiner Only
Question No.

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Arholwr yn unig

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Arholwr yn unig

Examiner Only

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