



12 Pages

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.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
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	22133 84
2	Title of Examination Paper	ACCA 4022 Computer Architecture
3	Module Code	
4	Date and Time of Examination	23/11/23 10.00
5	Examination Venue	
6	Seat Number	C6
7	Number of Answer Books handed in	

List the numbers of the questions you have attempted	Office Use
1	7
2	2
Total	09

(Gweler yr ochr arall am y fersiwn Cymraeg)



Prifysgol Cymru
Y Prifddod Dewi Sant
University of Wales
Trinity Saint David

Llyfr Atebion Arholiadau

12 Tudalen

Cyfarwyddiadau i Ymgeiswyr

1. Rhwch yr holl wybodaeth y gofynnir amdani yn y blychau isod.
2. Rhwch eich enw yn y lle a ddarparwyd ar y dde, plynwch ef a'i selio i lawr (gan ddefnyddio'r label a ddarparwyd i'ch enw).

3. Rhaid i'r atebion fod mewn llawysgriften ddarlennadwy. Gall yr Arholwyr naill ai anwybyddu sgript annarllennadwy, 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 ftras nodiadau yn y llifyr atebion a thynnu llinell drwyddynt.
6. Ni ddylid rhwgo unrhyw ran o'r llifyr hwn; rhaid ei gyflwyno yn gyfan.
7. Os defnyddir mwy nag un llifyr, rhwymwch hwy gyda'i gilydd gan ddefnyddio'r tagiau sydd ar gael oddi wrth y gwyllwyr/gwylwyr.
8. Rhaid dychwelyd pob llifyr. Ni chaniateir mynd â llifyrau atebion, wedi eu defnyddio neu heb eu defnyddio, allan o'r lleoliad arholi o dan unrhyw amgylchiadau.

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

(See the other side for English version)

Rhestrwch rffau'r cwestiynau a ymgeiswyd gennydh	Cyfanswm
At Ddiibenion y Swyddfa	

Llenwch, plygwrch a selwch
(gweler nodyn 2 isod)

CYFENW:

ENW(AU) CYNTAF:

One

a) $(769)_{10}$

~~$7 \times 10 + 2 \times 6 + 2 \times 9 + 2$~~

~~$7 \times 10 + 2 \times 6 \times 10 + 2 \times 9 \times 10 + 2$~~

~~$70 + 2 \quad 60 + 2 \quad 90 + 2 =$~~

~~$= (410688)_2$~~

b) $(9A2)_{16} = 1001 \ 1010 \ 0010 = (512)_2$

~~$2 \times 8 + 1 \times 8 + 0 \times 8$~~

~~$64 + 8 + 0$~~

Two

a) $(87)_{10} = 111110 =$

~~$1 \times 2^0 + 0 \times 2^1 + 1 \times 2^2 + 1 \times 2^3 + 1 \times 2^4 + 1 \times 2^5 = (10)_8$~~

b) $(5D9)_{16} =$

Convert the following number to decimal (Base 10)

a. $(1110101001)_2 =$

~~$1 \times 2^0 + 1 \times 2^1 + 1 \times 2^2 + 0 \times 2^3 + 1 \times 2^4 + 0 \times 2^5 + 1 \times 2^6 + 0 \times 2^7 + 0 \times 2^8 + 1 \times 2^9$~~

~~$1 + 2 + 4 + 0 + 16 + 0 + 64 + 0 + 0 + 512$~~

~~$1 \times 2^0 + 1 \times 2^1 + 1 \times 2^2 + 0 \times 2^3 + 1 \times 2^4 + 0 \times 2^5 + 1 \times 2^6 + 0 \times 2^7 + 0 \times 2^8 + 1 \times 2^9$~~

~~$(1 \times 2^0) + (1 \times 2^1) + (1 \times 2^2) + (0 \times 2^3) + (1 \times 2^4) + (0 \times 2^5) + (1 \times 2^6) + (0 \times 2^7) + (0 \times 2^8) + (1 \times 2^9)$~~

~~$+ (1 \times 2^0) + (1 \times 2^1) + (1 \times 2^2) + (0 \times 2^3) + (1 \times 2^4) + (0 \times 2^5) + (1 \times 2^6) + (0 \times 2^7) + (0 \times 2^8) + (1 \times 2^9)$~~

0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

29162
answer

Question 2

Ram B ✓
 Ethernet port F ✓
 Microphone D ✓
 flash drive C ✓
 Game pad e ✓

$$Q1.8/ (50E)_{16} = \underbrace{0101}_{10} \cdot \underbrace{0000}_{10} \underbrace{1110}_{10} =$$

0001 answer

$$Q1.5a. (4278)_{10} = \underbrace{(0100)}_{10} \underbrace{(0010)}_{10} \underbrace{(0111)}_{10} \underbrace{(0001)}_{10} =$$

001001110001 answer

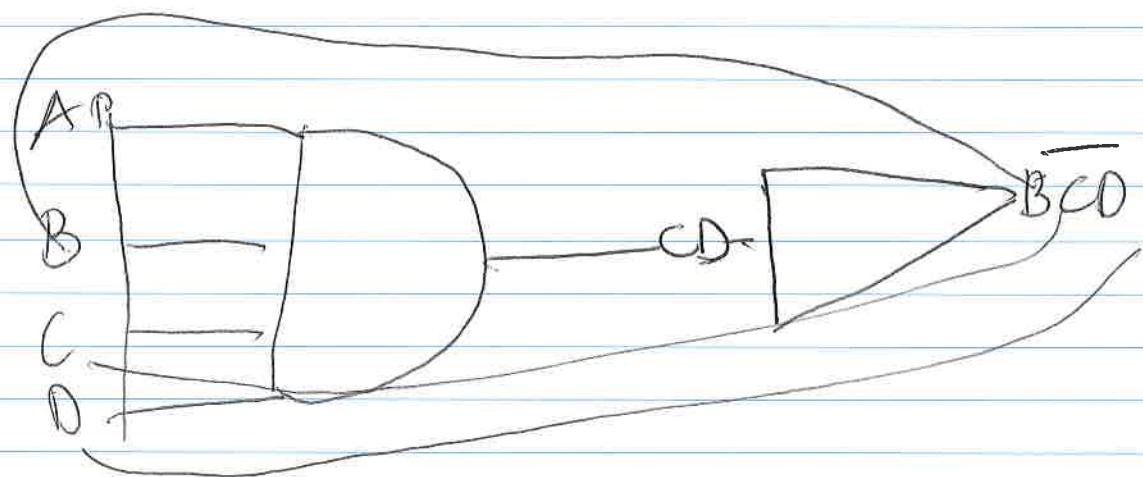
Q

Q 3

$$\overline{50000} = 10^4 50$$

4/

$$X = \overline{AB} + CD + B\overline{CD}$$



Question No.

Examiner Only

Question No.

Examiner Only

5/ Ratio !

Arbeitsvertrag

Arholwr yn unig Rhif y Cwestiwn

Rhif y Cwestiwn

Question No.

Examiner Only

Question No.

Examiner Only

Arholwr yn unig

Arholwr yn unig Rhif y Cwestiwn

Rhif y Cwestiwn