



12 Pages

1. Please give the information requested in the boxes
2. Enter your name in the space provided to the right, and seal down (using the label provided) to hide your name
3. The answers must be legibly written. The Examiner will be 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	2245692
2	Title of Examination Paper	Computer Arict
3	Module Code	ACCA4022
4	Date and Time of Examination	22/11/23 10:30
5	Examination Venue	QP
6	Seat Number	D2
7	Number of Answer Books handed in	

[illegible]

(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, pwygch ef a'i sello i lawr (gan ddefnyddio'r label a ddarparwyd) i guddio'ch enw.

1. Rhaid i'r atebion fod mewn llawysgriften ddarllenadwy. Gall yr Arholwyr naill ai anwybyddu sgript annarllenadwy, neu drefnu iddi gael ei theipio a chael yr ymgeisydd i dalu.
2. 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.
3. Os defnyddir mwy nag un llyfr, rhwymwch hwy gyda'i gilydd gan ddefnyddio'r tagiau sydd ar gael oddi wrth y gwyllwyr/gwyliwyr.
4. Ni ddylid rhwygo unrhyw ran o'r llyfr hwn; rhaid ei gyflwyno yn gyfan.
5. Dechreuwch bob ateb ar dudalen newydd. Gwnewch unrhyw fras nodiadau yn y llyfr atebion a thynnu llinell drwyddynt.
6. Ysgrifennwch eich atebion mewn inc.

(See the other side for English version)

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

Rheswch riau'r cwestiynau a ymgeiswyd gennych	Cyfanswm
At Dibenion y Swyddfa	

CYFENW:

ENW(AU) CYNTAF:

Llenwch, plygwrch a seliwrch
(gweler nodyn 2 isod)

1ia $(769)_{10} = (1100000001)_{10}$

	769	2
1	384	2
0	192	2
0	96	2
0	48	2
0	24	2
0	12	2
0	6	2
0	3	2
1	1	2
1	0	2

1ib $(9A2)_{16} = (1001000100000010)_{10}$

$(9102)_{16}$

$9 = 1001$

$1 = 0001$

$0 = 0000$

$2 = 0010$

1ia $(87)_{10} = (107)_{8}$

	87	8
7	10	8
2	1	8
1	0	8

1ib $(509)_{16} = (50471)_{8}$

$(5139)_{16}$

$5 = 0101$
 $0 = 0000$
 $4 = 0100$
 $7 = 0111$
 $1 = 0001$

$5 = 0101$
 $1 = 0001$
 $3 = 0011$

1iii a $(1110101001)_2 = (936)_{10}$

$$\begin{array}{cccccccc} 9 & 8 & 7 & 6 & 5 & 4 & 3 & 2 & 1 & 0 \\ 1 & 1 & 1 & 0 & 1 & 0 & 1 & 0 & 0 & 1 \end{array}$$

✓ 5

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

$$1 \times 512 + 1 \times 256 + 1 \times 128 + 0 \times 64 + 1 \times 32 + 0 \times 16 + 1 \times 8 + 0 \times 4 + 0 \times 2 + 1 \times 0$$

$$512 + 256 + 128 + 0 + 32 + 0 + 8 + 0 + 0 + 0 = 936$$

1iii b $(50E)_{16} = (1396)_{10}$

$$(5014)_{16}$$

	5014	16
6	313	16
9	19	16
3	1	16
1	0	16

1iv a $(4278)_{10} = (10116)_{16}$

	4278	16
6	267	16
11	10	16
0	1	16
1	0	16

1iv b $(670)_8 = (1B8)_{16}$

$$6 = 110$$

$$7 = 111$$

$$0 = 000$$

$$\begin{array}{ccccccc} 0 & 0 & 0 & 1 & 1 & 0 & 1 & 1 & 0 & 0 & 0 \\ 1 & & & 1 & 1 & & 8 \end{array}$$

$$1B8$$

2

1. RAM = (b) memory ✓
2. Ethernet Port = (f) communication device ✓
3. Microphone = (c) Input device ✓ ~~(d) output device~~
4. Flash Drive = (e) Storage Device ✓
5. Gamepad = (c) Input Device ✓

3

$$\frac{50000}{2 \times 2.5 \times 10^1} = 5c$$

$$\frac{50000}{5 \times 10^9} = 5c$$

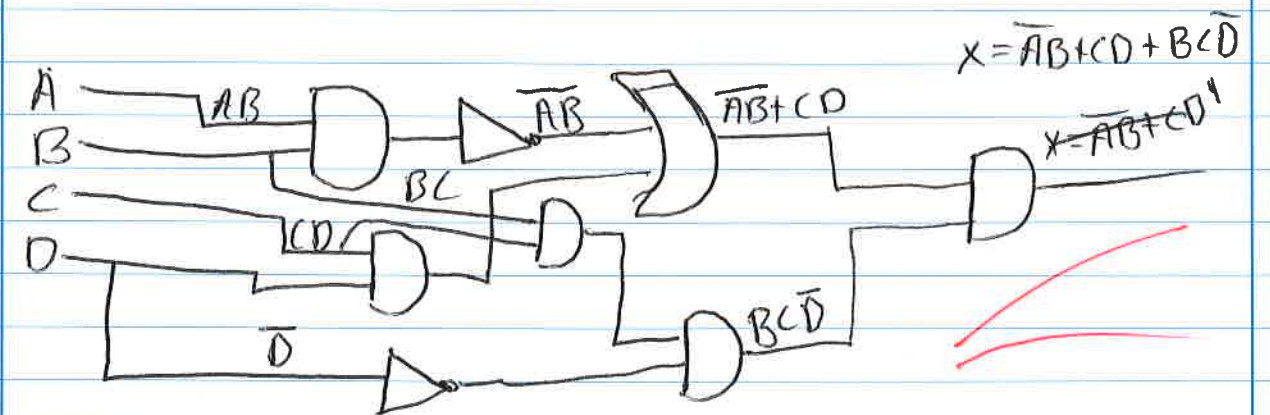
$$\frac{50000}{5} \times 10^{-9} \text{ sc}$$

$$10000 \times 10^{-9} \text{ sc}$$

$$10.000 \times 10^{-6} \text{ sc}$$

$$10.000 \text{ micro sc}$$

4



A	B	C	D	AB	CD	BCD
0	0	0	0			
0	0	0	1			
0	0	1	0			
0	0	1	1			
0	1	0	0			
0	1	0	1			
0	1	1	0			
0	1	1	1			
1	0	0	0			
1	0	0	1			
1	0	1	0			
1	0	1	1			
1	1	0	0			
1	1	0	1			
1	1	1	0			
1	1	1	1			

5b

RAID 1

A	=	A	F	=	F
B	=	B	G	=	G
C	=	C	H	=	H
D	=	D	I	=	I
E	=	E	J	=	J

5c) One advantage in RAID 1 is that you can have copy of your data so if one get destroy then you have Backup and one disadvantage of RAID 1 is, its too expensive because you have to buy storage.