



## 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.**

| List the numbers of the questions you have attempted | Office Use |
|------------------------------------------------------|------------|
| 1                                                    | 12         |
| 2                                                    | 3          |
| 4                                                    | 10         |
| 3                                                    | 3          |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
|                                                      |            |
| Total                                                | 28         |

(Gweler yr ochr arall am y fersiwn Cymraeg)



**Prifysgol Cymru**  
Y Prindod Dewi Sant  
**University of Wales**  
Trinity Saint David

## 12 Tüdalen

## 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, plygwch et a'i sellio i lawr (gan ddefnyddio'r label a ddarparwyd) i guddio'ch enw.

1. Rhaid i'r atebion fod mewn llawysgriften ddarllenadwy. Gall yr Arholiwr 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/gwylwyr.
4. Ni ddylid rhwgo 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.

|   |                                         |  |
|---|-----------------------------------------|--|
| 7 | Nifer y Llyfrau Atebion<br>a gyflwynwyd |  |
| 6 | Rhif Sedd                               |  |
| 5 | Lleoliad yr Arholiad                    |  |
| 4 | Dyddiad ac Amser yr<br>Archoliad        |  |
| 3 | Cod y Modwl                             |  |
| 2 | Tell y Papur<br>Arholiad                |  |
| 1 | Rhif Myfyriwr                           |  |

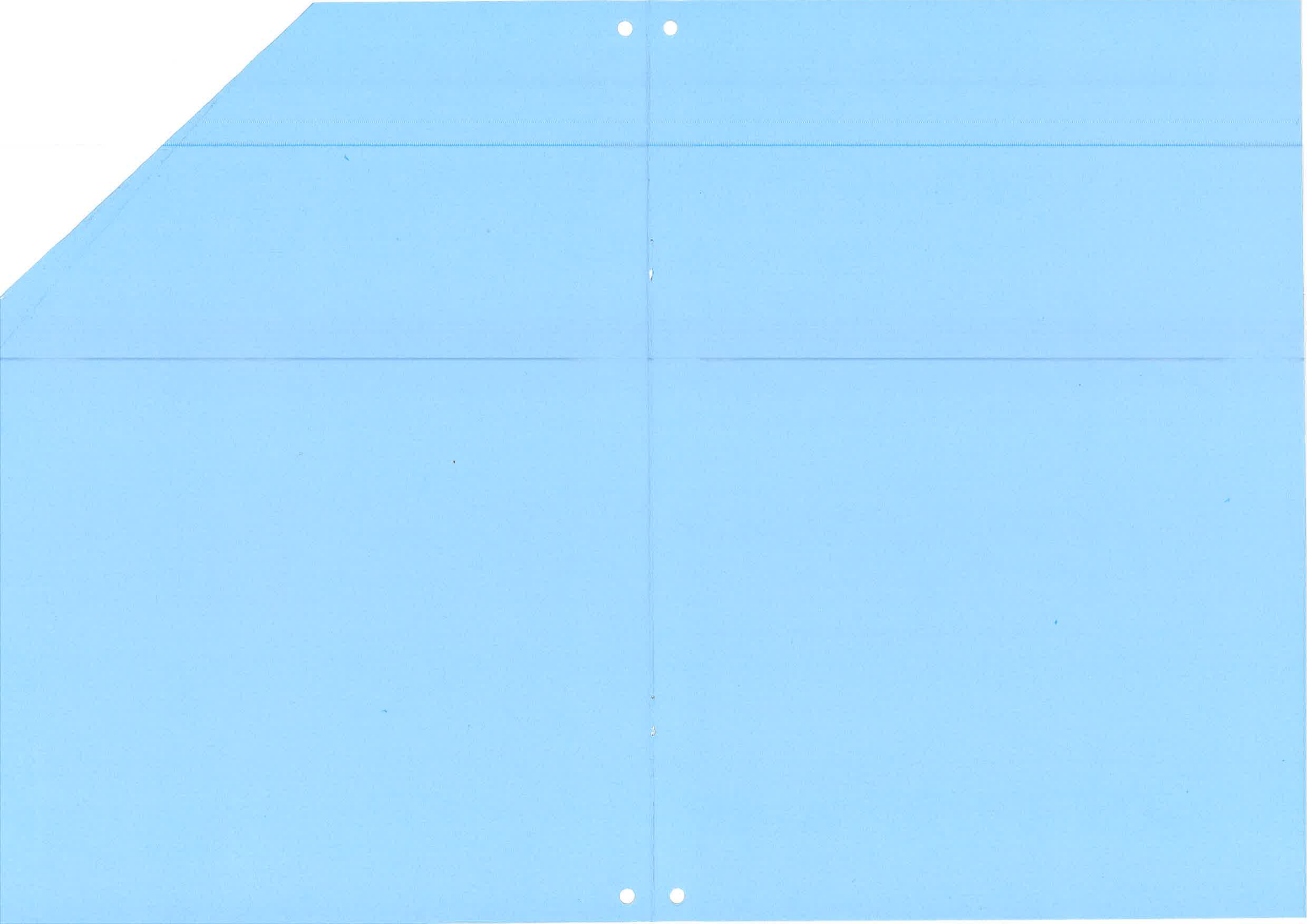
|                                                           |                          |
|-----------------------------------------------------------|--------------------------|
| Cyfanswm                                                  |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
|                                                           |                          |
| Rhestrwch ffau'r<br>cwestiynau a<br>ymgeistwyd<br>gennych | At Dibenion y<br>Swyddfa |

(See the other side for English version)

**CYFENN:**

ENW(AU) CYNTAF:

Llenwch, plygwh a selwch  
(gweler nodyn 2 isod)



i.

$$a) (769)_{10} \begin{array}{r|l} 769 & 2 \\ 1 & 384 \\ 0 & 192 \\ 0 & 96 \\ 0 & 48 \\ 0 & 24 \\ 0 & 12 \\ 0 & 6 \\ 0 & 3 \\ 1 & 1 \\ 1 & 0 \end{array}$$

$$b) (9A2)_{16} \\ \begin{array}{l} 1001 \ 1010 \ 0010 \end{array}$$

$$(1001 \ 1010 \ 0010)_2$$

ii.

$$b) (5A9)_{16} \\ \begin{array}{l} 0101 \ 1101 \ 1001 \end{array}$$

$$(0101 \ 1101 \ 1001)_2$$

$$(2731)_8$$

$$a) \begin{array}{r|l} 87 & 2 \\ 1 & 43 \\ 1 & 21 \\ 1 & 10 \\ 0 & 5 \\ 1 & 2 \\ 0 & 1 \\ 1 & 0 \end{array}$$

$$(1110110)_2$$

$$(167)_8$$

iii a)  $(1110101001)_2$

iv.  $(670)_8$   ~~$(110111000)_2$~~   $\begin{array}{r} 670 \\ 2 \end{array}$

~~$(011001110000)_{16}$~~

~~$(1B8)_{16}$~~   
 ~~$(AC0)_{16}$~~

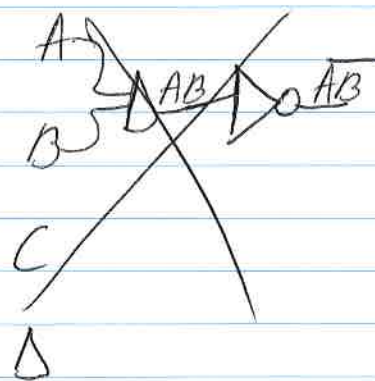
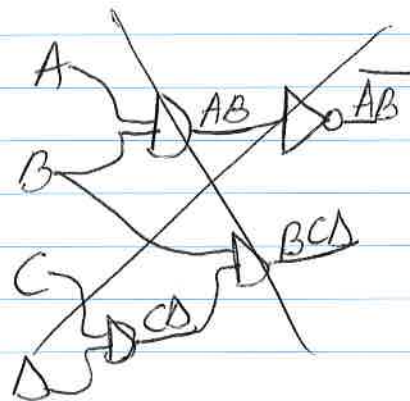
|   |     |
|---|-----|
| 0 | 335 |
| 1 | 167 |
| 1 | 83  |
| 1 | 41  |
| 1 | 20  |
| 0 | 10  |
| 0 | 5   |
| 1 | 2   |
| 0 | 1   |
| 1 | 0   |

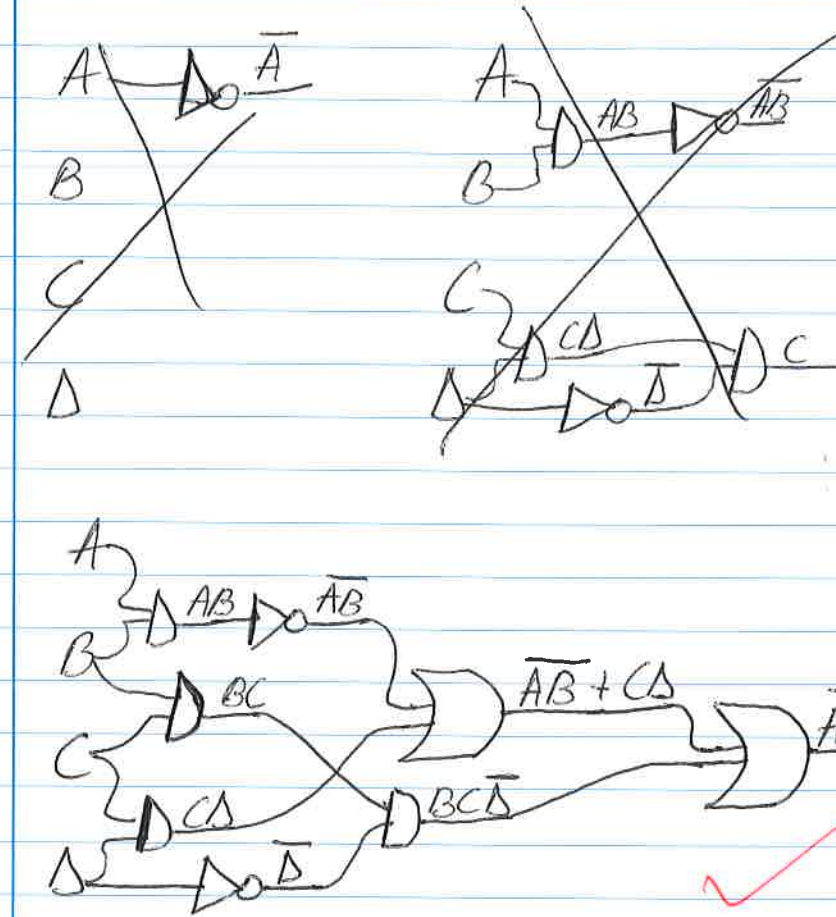
Question TWO

RAM - Memory ✓  
Ethernet Port - ~~input~~ <sup>output</sup> device ✓  
Microphone - Communication device ✓  
Flash Drive - Storage Device ✓  
Gamepad - input device ✓

Question Four

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





### Question Five

- a) Benefits of a Raid is that the computer or software will work faster and better

10

Question Three

$$\frac{50000}{2.5 \times 10^6} = \frac{5}{2.5 \times 10^2}$$

3/