

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.
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.**

Complete, fold and seal

(see note 2 below)

SURNAME: SUTTON

FORENAME(S): BRYN

1	Student Number	88924
2	Title of Examination Paper	ACCA 4001 Computer Architecture & networks
3	Module Code	ACCA 4001
4	Date and Time of Examination	10/05/2018 15:00 - 17:00
5	Examination Venue	Pembrokeshire college
6	Seat Number	1
7	Number of Answer Books handed in	1

List the numbers of the questions you have attempted	Office Use
1	22
2	12
3	18
4	15
Office Use	67

a) 128 64 32 16 8 4 2 1

a) $56 = 00110110 \times$

b) $163 = 10100011 \checkmark$

0

3

b)

a) $1110 / 0110 = 230 \checkmark$

$128+64+32 + 4+2$

$128+32 = 160 + 64 + 24 + 6$

3

b) $0101 / 0011 = 83 \checkmark$

$64+16 + 3$

3

c) 1 2 3 4 5 6 7 8 9 A B C D E F

a) 8B

$= 1000 / 1010 \checkmark$

2

b) $A7 = 1010 / 0111 \checkmark$

2

d)

a) $23 = 35 \checkmark$

$0010 / 0011$

$32 +$

$2+1 = 35$

3

b) $ER = 239 \checkmark$

$1110 / 1111$

$128+64+32 + 8+4+2+1$

$224 + 15$

3

e) 15 $\times$

480kB

f) $200 \times 800 = 160,000 \times 3 = 480,000 \text{ bytes or } 480 \text{ kB} \checkmark$

g) 250kB $\times$

0

<u>No.</u>	<u>Answer</u>	
1	✓ Ease of Set up ✓	
2	x DATA	
3	✓ Cross over Twisted PAIR	
4	x ~~FF:FF:FF:FF:FF:FF~~ 128 FF:FF:FF:FF:FF:FF	
5	x ~~200.165.200.255~~ 10.1.1.1	
6	x Default gateway	
7	✓ Transport	
8	✓ Selecting the path to destination networks	
9	✓ SPYware	
10	x Network interface card (NIC)	
11	x Frame	
12	✓ bandwidth: throughput	
13	✓ Brute force	
14	✓ SMTP	
15	✓ NFC	
16	x ~~10.1.1.1~~ 200.165.200.255	
17	✓ SSH	
18	✓ TCP	
19	x Encapsulation	
20	✓ DoS	
21	✓ UDP	
22	x Physical Network Topology	
23	✓ multicast	18
24	x 255.255.255.255	
25	x LAN Devices	
26	✓ reference model	
27	✓ HTTP Server	
28	✓ Internet	
29	✓ email	
30	x ~~FF:FF:FF:FF:FF:FF~~ 128	

d)

$$\begin{array}{r} 6 \\ 246 \\ 256 \end{array}$$

$$\frac{256}{128 \ 64 \ 32 \ 16 \ 8 \ 4 \ 2 \ 1}$$

78

64

14

240

48

52 + 2 + 1

55

e)

12

128

76

64

12

128 + 32

160 + 66

224 + 16

240

+ 15

255

77

128

54

128 + 66

x 92

128 + 32

160

x 12

i) $192. 168. 26. 38$

$$11001100. 10101000. 11010. 100110$$

ii) $172. 200. 78. 254$

$$10101100. 11000100. 1001110. 1111110$$

iii) $255. 255. 255. 240$

$$(111111). (111111). (111111). (1110000)$$

1



Question No.

Examiner Only

Arholwr yn uni

Rhif y Cwestiwn



Question No.

Examiner Only

