AQA

AS
COMPUTER SCIENCE
7516/2

Paper 2

Mark scheme

June 2024

Version: 1.0 Final

246A7516/2/MS

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

No student should be disadvantaged on the basis of their gender identity and/or how they refer to the gender identity of others in their exam responses.

A consistent use of 'they/them' as a singular and pronouns beyond 'she/her' or 'he/him' will be credited in exam responses in line with existing mark scheme criteria.

Further copies of this mark scheme are available from aqa.org.uk

Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

To Examiners:

- **When to award '0' (zero) or '–' (hyphen) when inputting marks on CMI+**

  A mark of 0 should be awarded where a candidate has attempted a question but failed to write anything creditworthy.

  Insert a hyphen when a candidate has not attempted a question, so that eventually the Principal Examiner will be able to distinguish between the two (not attempted/nothing creditworthy) in any statistics.

- This mark scheme contains the correct responses which we believe that candidates are most likely to give. Other valid responses are possible to some questions and should be credited. Examiners should refer responses that are not covered by the mark scheme, but which they deem creditworthy, to a **Team Leader**.

The following annotation is used in the mark scheme:

; - means a single mark
// - means an alternative response
/ - means an alternative word or sub-phrase
A. - means acceptable creditworthy answer
R. - means reject answer as not creditworthy
NE. - means not enough
I. - means ignore
DPT. - means "Don't penalise twice". In some questions a specific error made by a candidate, if repeated, could result in the loss of more than one mark. The **DPT** label indicates that this mistake should only result in a candidate losing one mark, on the first occasion that the error is made. Provided that the answer remains understandable, subsequent marks should be awarded as if the error was not being repeated.

Examiners are required to assign each of the candidate's responses to the most appropriate level according to **its overall quality**, and then allocate a single mark within the level. When deciding upon a mark in a level, examiners should bear in mind the relative weightings of the assessment objectives.

eg

In the following question the marks available are as follows:

Question 10 (max 12 marks)
AO1 (understanding) – 6 marks
AO2 (analyse) – 6 marks

Where a candidate's answer only reflects one element of the AO, the maximum mark they can receive will be restricted accordingly.

Qu	Pt	Marking Guidance	Marks
01	1	**Mark is for AO1 (knowledge)** All possible real-world quantities/values/numbers; (Includes) the rational and irrational numbers (and the integers and natural numbers); A value that represents any quantity along the number line; **A.** All numbers excluding imaginary/complex numbers. **Max 1**	1

Qu	Pt	Marking Guidance	Marks
01	2	**Marks are for AO1 (understanding)** **1 mark** per correct lozenge D (5 is a natural number); E (5 is a rational number); **R.** more than two lozenges shaded	2

Qu	Pt	Marking Guidance	Marks
01	3	**Mark is for AO1 (knowledge)** C (ℚ); **R.** more than one lozenge shaded	1

Qu	Pt	Marking Guidance	Marks
02	1	**Mark is for AO2 (application)** 8A;	1

Qu	Pt	Marking Guidance	Marks
02	2	**Mark is for AO2 (application)** `1000 1011`;	1

Qu	Pt	Marking Guidance	Marks

02	3	**Marks are for AO2 (application)**
		
		`Answer = 0100 1110;`
		`Carry row = 0010 0011;`
		
		The 1 carry bits (or some similar notation) must be shown in the correct columns (or correct sequence) but 0 carry bits can be omitted.
			2

Qu	Pt	Marking Guidance	Marks
02	4	**Marks are for AO2 (application)** **1 mark** for correct conversion from `00011100` (28) to `11100100` (-28) **1 mark** for binary addition of `00111011` (59) to `11100100` (-28) to give `00011111` // **2 marks** for a correct final answer provided relevant working is shown and the working uses two's complement in an attempt to solve the problem **A.** If no other marks awarded, award 1 mark for correct conversion of `00111011` (59) to `11000101` (-59) **R.** Reject both marks if decimal subtraction has been used	2

Qu	Pt	Marking Guidance	Marks
02	5	**Marks are for AO2 (application)** 7.34375 // 7 11/32 // 235/32; **1 mark** for correct integer part (or a numerator that produces the correct integer part when an improper fraction shown) **1 mark** for correct fractional part	2

Qu	Pt	Marking Guidance	Marks
03	1	**Mark is for AO1 (knowledge)** Analogue to Digital Converter // ADC;	1

Qu	Pt	Marking Guidance	Marks
03	2	**Marks are for AO2 (application)** **2 marks** for correctly showing the number of colours that can be used 2^5 // 32 **1 mark** awarded for working out the colour depth (5) used in the bitmap image if the correct answer is not shown $\frac{(845 \times 8)}{(52 \times 26)}$	2

Qu	Pt	Marking Guidance	Marks
03	3	**Mark is for AO1 (knowledge)** Metadata;	1

Qu	Pt	Marking Guidance	Marks
03	4	**Marks are for AO2 (application)** **3 marks** for the correct answer including the unit of time 42 seconds or **2 marks** for 42 with no time unit If answer is incorrect then award **1 method mark for two or three steps** from the list below or **2 method marks for all four steps**. • multiplying by 8000 • multiplying by 12 096 • dividing by 24 // multiplying by 24 on same side of = as the time value • dividing by 96 000 // multiplying by 96 000 on same side of = as the time value The following method points are equivalent to performing **two** of the method points in the list above: • multiplying by (or showing a numerator of) 96 768 000 • dividing by (or showing a denominator of) 2 304 000 // multiplying by 2 304 000 on same side of the = as the time value	3

Qu	Pt	Marking Guidance	Marks
03	5	**Mark is for AO1 (understanding)** There is reduced quantisation error // each sample can be represented/stored more accurately; **NE.** improved sound quality **NE**. increases accuracy of measurement **R.** references to more samples / sample rate	1

Qu	Pt	Marking Guidance	Marks
03	6	**Marks are for AO1 (understanding)** Music represented as sequence of MIDI (event) messages // uses messages to represent different events in a piece of music; **A.** Music represented as sequence of instructions **NE.** Music represented as sequence of notes Playback of music is the combination of event messages with a specified ordering; One example of data that might be contained in a message: • Channel • Note on / note off • Pitch / frequency / note number • Volume / loudness • Velocity • Key pressure / aftertouch • Duration / length • Timbre • Instrument • Pedal effects • Pitch bend • Note envelope; MIDI messages are usually two or three bytes long; First byte of each MIDI message is a status byte (others are data bytes); Bit rate is 31 250 bits per second; MSB value of 1 indicates status byte, 0 indicates data bytes; Status bytes are divided into a command and a channel number (4 bits for each); Sixteen channels are supported; **Max 2**	2

Qu	Pt	Marking Guidance	Marks
03	7	**Mark is for AO1 (understanding)** File sizes are (typically) smaller // More compact representation; Easy to modify/edit (at note level); Ease of manipulation for entire recordings // easy to change recording values (eg changing an octave for an entire score); Easy to change instruments; Simple method to compose algorithmically; Musical score can be generated directly from a MIDI file; A MIDI file can be directly output to control a device; MIDI records the musician's inputs rather than the sound produced; Ease of composing/combining/overlaying existing recordings; No data lost about musical notes // no data lost through sampling; **A.** "better quality" but only if it there is some explanation of this eg "no error introduced during sampling", "no background noise recorded" **Max 1**	1

Qu	Pt	Marking Guidance	Marks
04	1	**Mark is for AO2 (application)** S00ZE;	1

Qu	Pt	Marking Guidance	Marks
04	2	**Marks are for AO1 (understanding)** Each letter/character is always encrypted to the same letter/character; The letters/characters in the ciphertext will have the same frequency as their corresponding letters/characters in the plaintext (allowing the correspondence to be worked out given enough ciphertext); **A.** The ciphertext is susceptible to frequency analysis There are a very small number of possible keys (25 **A.**26) (so it can be cracked by brute force); If a single mapping is known then the remaining (25) can be easily calculated; The ciphertext will retain structural properties of the plaintext message; **A.** Examples of structural properties, eg some letters frequently occur next to each other, some letters rarely appear next to each other, position of spaces can identify word lengths, common short words can be identified **Max 2**	2

Qu	Pt	Marking Guidance	Marks
05	1	**Mark is for AO1 (knowledge)** C (Programming language translator);	1

Qu	Pt	Marking Guidance	Marks
05	2	**Marks are for AO1 (knowledge)** Processor // microprocessor // central processing unit // CPU; Main memory // random access memory // RAM; **A.** Memory controller Secondary storage // backing store; **A.** HDD // SSD Cache; **A.** Cache controller Power supply unit // battery management // PSU; **R.** Software-implemented resources (eg scheduler, virtual memory, file management) **Max 2**	2

Qu	Pt	Marking Guidance	Marks
06	1	**Mark is for AO1 (knowledge)** XOR // EXOR // EX-OR // Exclusive-OR // EOR;	1

<table>
<tr><th>Qu</th><th>Pt</th><th>Marking Guidance</th><th>Marks</th></tr>
<tr><td>06</td><td>2</td><td>Marks are for AO2 (application)

1 mark for columns L and M correct

1 mark for column Z correct
A. follow through of incorrect values in columns L and M

<table>
<tr><th>A</th><th>B</th><th>C</th><th>L</th><th>M</th><th>Z</th></tr>
<tr><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr>
</table>

R. Entire column if more than one value shown in any cell of that column.</td><td>2</td></tr>
</table>

<table>
<tr><th>Qu</th><th>Pt</th><th>Marking Guidance</th><th>Marks</th></tr>
<tr><td>06</td><td>3</td><td>Marks are for AO2 (application)

Award full marks for showing correct expression:

$\mathrm{Q} = \overline{\overline{\mathrm{A}}.\,\mathrm{B}.\,(\mathrm{C}+\mathrm{D})}$

Max 2 marks for showing partially correct expression:

1 mark for showing $\overline{\mathrm{A}}.\,\mathrm{B}$

1 mark for showing of $\mathrm{C}+\mathrm{D}$

1 mark for using AND and NOT gates to combine and invert subexpressions

Full marks should be awarded for equivalent expressions.</td><td>3</td></tr>
</table>

Qu	Pt	Marking Guidance	Marks
06	4	**Marks are for AO2 (application)** Marking guidance for examiners • Award marks for working out until an incorrect step has been made. • If, in any one step, a candidate is simplifying different parts of an expression simultaneously award all relevant marks for this multiple stage but don't award any further marks for working in any parts simplified incorrectly. Example, if the expression P.P.(P+Q) + P.P.1 was changed to P.(P+Q) + P.0, the candidate would get one mark for simplifying the first part to P.(P+Q) and could get further marks for correctly simplifying this part of the expression further but should not be awarded marks for simplifying the incorrectly changed part P.0 (ie to 0). Award up to **3 marks** for working. **1 mark per application** of a technique that produces a simplified expression. Of the 3 working marks **award at most 1 mark for correctly applying the Distributive Law** to expand or introduce brackets. **Note:** A simpler expression is one that is logically equivalent to the original expression but uses fewer logical operators. **1 mark** for final answer: $X \cdot Z + X \cdot Y + W \cdot Z$ or $X \cdot (Z + Y) + W \cdot Z$ **Example working 1:** $\overline{W} \cdot X \cdot Z + W \cdot Z + X \cdot Y \cdot \overline{Z} + \overline{W} \cdot X \cdot Y \cdot 1$ $\overline{W} \cdot X \cdot Z + W \cdot Z + X \cdot Y \cdot \overline{Z} + \overline{W} \cdot X \cdot Y$ Identity $A.1 = A$ $Z \cdot (\overline{W} \cdot X + W) + X \cdot Y \cdot \overline{Z} + \overline{W} \cdot X \cdot Y$ Distributive, put into brackets $Z \cdot (X + W) + X \cdot Y \cdot \overline{Z} + \overline{W} \cdot X \cdot Y$ $\overline{A}.B + A = B + A$ $X \cdot Z + W \cdot Z + X \cdot Y \cdot \overline{Z} + \overline{W} \cdot X \cdot Y$ Distributive, expand brackets $X \cdot (Z + Y \cdot \overline{Z}) + W \cdot Z + \overline{W} \cdot X \cdot Y$ Distributive, put into brackets $X \cdot (Z + Y) + W \cdot Z + \overline{W} \cdot X \cdot Y$ $\overline{A}.B + A = B + A$ $X \cdot Z + X \cdot Y + W \cdot Z + \overline{W} \cdot X \cdot Y$ Distributive, expand brackets $X \cdot Z + X \cdot Y \cdot (1 + \overline{W}) + W \cdot Z$ Distributive $X \cdot Z + X \cdot Y + W \cdot Z$ Identity $1 + A = A$ $X \cdot (Z + Y) + W \cdot Z$ (optional step)	4

		Example working 2 : $\bar{W}.X.Z+W.Z+X.Y.\bar{Z}+\bar{W}.X.Y.1$ $\bar{W}.X.Z+W.Z+X.Y.\bar{Z}+\bar{W}.X.Y$ Identity A.1 = A $Z.(\bar{W}.X+W) + X.Y.\bar{Z}+\bar{W}.X.Y$ Distributive, put into brackets $Z.(X+W) + X.Y.\bar{Z}+\bar{W}.X.Y$ Identity $\bar{A}.B + A = B + A$ $Z.X + Z.W + X.Y.\bar{Z}+\bar{W}.X.Y$ Distribution, expand brackets $Z.W + Z.X + X.Y.\bar{Z}+\bar{W}.X.Y$ Re-arrange terms $Z.W+ X(Z+\bar{Z}.Y) + \bar{W}.X.Y$ Distribution, put into brackets $Z.W+ X(Y + Z) + \bar{W}.X.Y$ Identity $\bar{A}.B + A = B + A$ $Z.W + X.Y + X.Z + \bar{W}.X.Y$ Distribution, expand brackets $X.Z + Z.W + X.Y + \bar{W}.X.Y$ Re-arrange terms $X.Z + Z.W + X.Y$ Identity A + A.B = A	

Qu	Pt	Marking Guidance	Marks
07	1	**Marks are for AO1 (understanding)** **1 mark** for two or three components correctly identified **2 marks** for four components correctly identified **1**: Memory Address Register **2**: Address Bus **3**: Memory Buffer Register **A.** Memory Data Register **4**: Data Bus	2

Qu	Pt	Marking Guidance	Marks
07	2	**Marks are for AO1 (knowledge)** (Machine code) Instructions are stored in (main) memory; Instructions are fetched, (decoded) and executed (serially) by the processor; Programs can be moved in to (and out of) main memory; **Max 2**	2

Qu	Pt	Marking Guidance	Marks
07	3	**Marks are for AO1 (knowledge)** Register (number); Memory address / location; **A.** offset from a memory location **Max 2**	2

Qu	Pt	Marking Guidance	Marks
07	4	**Marks are for AO1 (understanding)** Increases the probability/likelihood/chance that data/instructions will be found in cache (and cache memory is faster than main memory); **A.** Increases probability/likelihood/chance of cache hit (without cache hit definition) **A.** Fewer accesses to slower memory types, eg main memory **A**. More instructions can be accessed from high speed memory Allows for more bits to be simultaneously processed (in the execution of a single instruction) // Allows for more bits to be simultaneously transferred (within the processor);	2

Qu	Pt	Marking Guidance	Marks
08		**Marks are for AO3 (programming)** **1 mark** each for each program point: • Comparing the values in R1 and R3 **A.** Indirect comparisons • Using a branch instruction to execute different blocks of code. • Always terminating with the greater number stored in R1. • Terminating with 1 stored in R2 when the greater number was in R1 and 3 stored in R2 otherwise. **Max 3** marks for programming if any syntax incorrect or program does not work correctly under all circumstances	4

Example 1

```
          CMP R1, R3
          BGT r1bigger
          MOV R1, R3
          MOV R2, #3
          B   Done
r1bigger: MOV R2, #1
done:     HALT
```

Example 2

```
          SUB R2, R1, R3
          CMP R2, #0
          BGT finish
          MOV R2, #1
          B   done
finish:   MOV R1, R3
          MOV R2, #3
done:     HALT
```

Example 3

```
          MOV R2, #1
          CMP R1, R3
          BGT done
          MOV R1, R3
          MOV R2, #3
done: HALT
```

Qu	Pt	Marking Guidance	Marks
09	1	**Marks are for AO1 (understanding)** The RFID reader emits radio waves; (The antenna in the RFID tag allows) the radio waves to induce sufficient power in the tag to enable/power the tag // triggers an active tag; Data is stored on the chip/memory of the tag; In response the tag emits radio waves to transmit the data on the tag to the RFID reader; **A.** Frequency or signal for radio waves **Note:** Accept references to data, instead of radio waves, if it is made clear somewhere in the response that radio waves/signals/frequencies are being used. **Max 3**	3

Qu	Pt	Marking Guidance	Marks
09	2	**Marks are for AO1 (understanding)** Passive tags are smaller // are more convenient for users to carry; (As passive tags can only be read when close to the reader) it is less of a security risk // it is more difficult to intercept/steal the data from the passport; Using passive tags is likely to be cheaper than using active tags (especially at a national scale); In passive tags there is no need to replace/charge battery // in active tags battery may not last as long as the passport is valid; Accept points made as disadvantages of active tags or as advantages of passive tags **Max 2**	2

<table>
<tr><th>Qu</th><th>Pt</th><th>Marking Guidance</th><th>Marks</th></tr>
<tr><td>10</td><td></td><td>
6 marks are for AO1 (understanding)
6 marks are for AO2 (analyse)

Level of response question:

<table>
<tr><th>Level</th><th>Description</th><th>Mark Range</th></tr>
<tr><td>3</td><td>A line of reasoning has been followed to produce a coherent, relevant, substantiated and logically structured response. Answers in this level will demonstrate a clear and detailed awareness of the properties of solid-state drives. The response covers a wide range of issues and is likely to cover the moral ethical, legal and cultural aspects of the question. Several of the points made will have been expanded upon using clear examples and references to real-world implications.</td><td>9–12</td></tr>
<tr><td>2</td><td>A line of reasoning has been followed to produce a mostly coherent, relevant, substantiated and logically structured response. Answers in this level will identify a small number of properties of solid-state drives but may fail to develop points. The response is likely to cover at least two of moral, ethical, legal and cultural aspects of the question. Some of the points made may have been expanded on.</td><td>5–8</td></tr>
<tr><td>1</td><td>There is little evidence that a line of reasoning has been followed. Answers in this level may identify some properties of solid-state drives. Answers may have attempted to identify some moral, ethical, legal and cultural issues. Points are not likely to be expanded upon but where they are, the examples may not be relevant or not relate to the points being made.</td><td>1–4</td></tr>
</table>

Indicative content

<u>Area 1:</u> Moral, ethical, legal and cultural issues

Moral (individual beliefs)
• There is the potential for the technology to be misused by criminals (eg stalking, tracking partners/children/pets/strangers/property without permission).
• Criminals could put them into the pockets/luggage of targets/victims/children to find out where they live.
• Individuals might become over-reliant on the technology and not look after their property.
• Individuals might not wish for their phones to be used to send signals on behalf of other users or in support of the company’s network, even with encryption.

Ethical (society)
• Right to privacy eroded as your movements are tracked by the company.
• “Big Brother” society where your every move is monitored and analysed.
• Could it be used to track people in a good way, for example elderly or ill patients.
</td><td>12</td></tr>
</table>

		• Individuals in some jurisdictions will have had to agree for their phones to relay signals in support of the company's network but they may not want to or even know that they have agreed to such terms. **Legal** • As the tag moves internationally through different countries different laws will exist about data collection and privacy. • Computer Misuse Act would be applied in the UK to prevent unauthorised access to the tag and the location data. • General Data Protection Regulation (GDPR) affords protections to data subjects and provides rights relating to access, accuracy, deletion, etc. **Cultural (subgroups)** • Older people might be very distrustful or fearful of this technology. • This tag would only work in an area with a high number of phones / phone coverage, therefore it is not suitable for rural locations or places with few phone users for other reasons. • Different societies may have different views on the privacy issues related to location tracking. **<u>Area 2</u>: Suitability of storage device** **Solid-state drive properties:** • Higher read and write speeds than hard disks (because there are no moving parts means they'd be more likely to keep up with the requests). • Less prone to (terminal) failure from dropping/collisions/movement (because there are no moving parts or joints), which means there is less likelihood of costs being incurred from damaged drives. • Generally more energy efficient, which can lead to reduced costs (operational and/or cooling), provide a cooler / more comfortable operating environment, and be more environmentally friendly. • Generally small in physical size, which means that the amount of space required to house them / operational cost can be reduced. • More expensive (per bit) for the same amount of memory, (which means that the company would be investing more in the purchase of the drives initially). • The lifetime of a solid-state drive is relatively fixed, due to there being an approximate maximum number of writes before it becomes unreliable/unusable.	

Qu	Pt	Marking Guidance	Marks
11	1	**Marks are for AO1 (knowledge)** Bit rate is the number of bits transmitted per second; Baud rate is the number of times that a signal can change per second (on a medium);	2

Qu	Pt	Marking Guidance	Marks
11	2	**Marks are for AO1 (understanding)** Each user has equal status // each user can use and provide file sharing services // users can individually control who can access their photographs // users manage their own security; Easier / less expensive to setup/maintain (than a centralised server); Provides scalability without the need for a high-performance server/hardware; No reliance on central server // (some of the) service remains available if one peer fails; **Max 2**	2

Qu	Pt	Marking Guidance	Marks
11	3	**Mark is for AO1 (understanding)** (A locally unique) identifier (**A.** name) given to a wireless network // (SSID) allows a user/device to identify/connect to (**A.** join) network); **N.E**. To find the network without reference to identifier or connection.	1

Qu	Pt	Marking Guidance	Marks
11	4	**Marks are for AO1 (understanding)** The SSID/Service Set Identifier of the network will not be visible when trying to connect to a network; Only users who know the SSID of the network can connect // users who do not know the SSID cannot connect // makes it harder for a (malicious) user to connect unless they know the SSID; **A**. name for SSID	2