

OXFORD

INTERNATIONAL  
AQA EXAMINATIONS

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# INTERNATIONAL GCSE COMPUTER SCIENCE

## 9210

Paper 2 Concepts and principles of computer science

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Mark scheme

June 2022

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Version 1.0 Final



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.

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| Question | Part | Marking guidance | Total marks |
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| 01 | 1 | C9 | 1<br>AO2=1 |
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| Question | Part | Marking guidance | Total marks |
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| 01 | 2 | 256 // $2^8$ ; | 1<br>AO2=1 |
|----|---|----------------|------------|

| Question | Part | Marking guidance | Total marks |
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| 01 | 3 | 256 // $2^8$ ; | 1<br>AO2=1 |
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| Question | Part | Marking guidance | Total marks |
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| 01 | 4 | 01011000;<br>R. if answer does not use one byte | 1<br>AO2=1 |
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| Question | Part | Marking guidance | Total marks |
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|    |   |                                                                                                                                                                                   |                       |
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| 02 | 1 | A single dot of colour <b>A</b> . A square/block/unit of colour<br>//<br>The smallest part of an image <b>NE</b> . Part of an image<br>//<br>A single point in a graphical image; | 1<br><br><b>AO1=1</b> |
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| Question | Part | Marking guidance | Total marks |
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| 02 | 2 | Larger file size <b>NE</b> . larger/bigger if could apply to image dimensions<br>//<br>Will use more storage (space)/memory<br>//<br>Take longer to download/transmit; | 1<br><br><b>AO1=1</b> |
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| Question | Part | Marking guidance | Total marks |
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| 02 | 3 | 8 // $2^3$ ; | 1<br><br><b>AO2=1</b> |
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| Question                                                                                                                                                                                                                                 | Part | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Total marks                             |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|-----|-------------------------------|
| 02                                                                                                                                                                                                                                       | 4    | <table><tr><th>Image</th><th>Represented using bit pattern? (Yes/No)</th></tr><tr><td></td><td>Yes</td></tr><tr><td></td><td>Yes</td></tr><tr><td></td><td>No</td></tr><tr><td></td><td>Yes</td></tr><tr><td></td><td>Yes</td></tr></table> | Image                                   | Represented using bit pattern? (Yes/No) |  | Yes |  | Yes |  | No |  | Yes |  | Yes | <div>3</div> <div>AO2=3</div> |
|                                                                                                                                                                                                                                          |      | Image                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Represented using bit pattern? (Yes/No) |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |
|                                                                                                                                                                                                                                          |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes                                     |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |
|                                                                                                                                                                                                                                          |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes                                     |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |
|                                                                                                                                                                                                                                          |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No                                      |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |
|                                                                                                                                                                                                                                          |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Yes                                     |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |
|                                                                                                                                                                                                                                          |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Yes                                     |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |
| <p><b>Mark as follows:</b></p> <p><b>1 mark:</b> Any three rows correct</p> <p><b>2 marks:</b> Any four rows correct</p> <p><b>3 marks:</b> All rows correct</p> <p><b>A.</b> Other symbols that could indicate yes/no eg tick/cross</p> |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                         |                                         |                                                                                   |     |                                                                                   |     |                                                                                   |    |                                                                                     |     |                                                                                     |     |                               |

| Question | Part | Marking guidance | Total marks |
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| 03 | 1 | <b>B</b> (An assembler can be used to convert an assembly language program into machine code);<br><b>R.</b> more than one row ticked<br><b>A.</b> use of alternative symbol than tick | <b>1</b><br><br><b>AO1=1</b> |
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| Question | Part | Marking guidance | Total marks |
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| 03 | 2 | <b>A</b> (Binary);<br><b>R.</b> more than one row ticked<br><b>A.</b> use of alternative symbol than tick | <b>1</b><br><br><b>AO1=1</b> |
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| Question | Part | Marking guidance | Total marks |
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| 03 | 3                                                                                                      | <p>The table below lists differences.</p> <p><b>For rows marked with a #:</b> <b>1 mark</b> can be awarded for each side of the difference as one does not directly imply the other. If both sides are stated then <b>2 marks</b> should be awarded.</p> <p><b>For rows without a #:</b> award <b>1 mark</b> for the statement of either side of the difference, but <b>do not award 2 marks</b> for stating both sides.</p> <table><tr><th></th><th>HLL</th><th>LLL</th></tr><tr><td>#</td><td>HLL commands are more powerful than LLL commands // one HLL command is equivalent to many LLL commands</td><td>LLL commands are for primitive operations (<b>A.</b> examples eg ADD, STORE)</td></tr><tr><td>#</td><td>In HLL keywords are meaningful (<b>A.</b> expressed in English)</td><td>In LLL keywords are expressed in mnemonics/short codes (<b>NE.</b> binary)</td></tr><tr><td>#</td><td>HLL code always needs to be translated (before it can be executed)</td><td>LLL commands directly map to commands the processor can execute // commands written in <u>machine code</u> can be executed directly by the processor (<b>A.</b> “understood” or “read” for “executed” as BOD) // <u>machine code</u> commands</td></tr></table> |  | HLL | LLL | # | HLL commands are more powerful than LLL commands // one HLL command is equivalent to many LLL commands | LLL commands are for primitive operations ( <b>A.</b> examples eg ADD, STORE) | # | In HLL keywords are meaningful ( <b>A.</b> expressed in English) | In LLL keywords are expressed in mnemonics/short codes ( <b>NE.</b> binary) | # | HLL code always needs to be translated (before it can be executed) | LLL commands directly map to commands the processor can execute // commands written in <u>machine code</u> can be executed directly by the processor ( <b>A.</b> “understood” or “read” for “executed” as BOD) // <u>machine code</u> commands | 4<br><br>AO1=4 |
|----|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----|-----|---|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---|------------------------------------------------------------------|-----------------------------------------------------------------------------|---|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|    | HLL                                                                                                    | LLL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |     |     |   |                                                                                                        |                                                                               |   |                                                                  |                                                                             |   |                                                                    |                                                                                                                                                                                                                                                |                |
| #  | HLL commands are more powerful than LLL commands // one HLL command is equivalent to many LLL commands | LLL commands are for primitive operations ( <b>A.</b> examples eg ADD, STORE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |     |     |   |                                                                                                        |                                                                               |   |                                                                  |                                                                             |   |                                                                    |                                                                                                                                                                                                                                                |                |
| #  | In HLL keywords are meaningful ( <b>A.</b> expressed in English)                                       | In LLL keywords are expressed in mnemonics/short codes ( <b>NE.</b> binary)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |     |     |   |                                                                                                        |                                                                               |   |                                                                  |                                                                             |   |                                                                    |                                                                                                                                                                                                                                                |                |
| #  | HLL code always needs to be translated (before it can be executed)                                     | LLL commands directly map to commands the processor can execute // commands written in <u>machine code</u> can be executed directly by the processor ( <b>A.</b> “understood” or “read” for “executed” as BOD) // <u>machine code</u> commands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |     |     |   |                                                                                                        |                                                                               |   |                                                                  |                                                                             |   |                                                                    |                                                                                                                                                                                                                                                |                |

|  |  |                                                                    |                                                                                                                                |  |
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|  |  |                                                                    | do not need to be translated (to be executed) // <u>machine code</u> can be executed more quickly (as no translation required) |  |
|  |  | HLL provides support for subroutines                               | (Some) LLLs do not support subroutines                                                                                         |  |
|  |  | HLL has built-in data structures <b>A.</b> examples eg list, array | LLLs do not provide data structures                                                                                            |  |
|  |  | HLL has wide range of built-in functions/libraries                 | Built-in functions and libraries not provided/limited                                                                          |  |
|  |  | HLL directly supports iteration / loops                            | Writing code for a loop in LLL more complex                                                                                    |  |
|  |  | HLL does not provide direct access to hardware <b>NE.</b> computer | LLL provides direct access to hardware                                                                                         |  |
|  |  | HLL code is easier to understand, debug, read                      | LLL code is harder to understand, debug, read                                                                                  |  |
|  |  | HLL facilitates faster development of programs                     | LLL program development is slow                                                                                                |  |

| Question | Part | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Total marks                         |
|----------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 04       |      | <p><b>1 mark:</b> Lists are combined firstly into three two-item lists then into a four-item and a three-item list. Award this mark even if the values combined are incorrect.<br/> <b>A.</b> 30 shown again as a one-item list at this stage</p> <p><b>1 mark:</b> The first set of lists combined are [34, 87], [2, 17] and [9, 63].<br/> <b>A.</b> 30 shown again as a one-item list at this stage</p> <p><b>1 mark:</b> The final two sets of lists combined are [2, 17, 34, 87] and [9, 30, 63] and the final list is the correct sorted list [2, 9, 17, 30, 34, 63, 87].</p> <p><b>Max 2</b> if any combinations or values are incorrect.</p> <p><b>DPT</b> if a student changes a value eg 34 to 31, as long as it is clear that this is what has happened.</p> | <p><b>3</b></p> <p><b>AO2=3</b></p> |

| Question | Part | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Total marks                         |
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| 05       | 1    | <p>Sound is analogue / continuously variable;</p> <p>Computers cannot process analogue / continuously variable data;</p> <p>Computers can only represent / process data that is discrete/digital/binary;</p> <p><b>A.</b> only discrete/digital/binary data can be represented / processed</p> <p><b>A.</b> “0s and 1s” for “binary”</p> <p><b>A.</b> “read” or “understand” for “represent”</p> <p><b>NE.</b> sound must be converted to digital/binary values</p> <p><b>Max 1</b></p> | <p><b>1</b></p> <p><b>AO1=1</b></p> |

| Question | Part | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Total marks                         |
|----------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 05       | 2    | <p><b>3 marks</b> for correct answer 50</p> <p>If incorrect then award up to <b>2 method marks</b> for each of:</p> <ul style="list-style-type: none"> <li>• Converting the file size to bits: writing <math>1000 \times 1000 \times 8</math>, <math>1000000 \times 8</math> or <math>8000000</math> somewhere in the working <b>OR</b> converting the file size to bytes: writing <math>1000 \times 1000</math> or <math>1000000</math> somewhere in the working.</li> <li>• Calculating how many bits used per second: writing <math>16 \times 10000</math> or <math>160000</math> somewhere in the working <b>OR</b> calculating how many bytes used per second: writing <math>2 \times 10000</math> or <math>20000</math> somewhere in the working.</li> <li>• Writing out an equation to equate to the file size in bits: <math>16 \times 10000 \times \text{number of seconds} = 1000 \times 1000 \times 8</math> <b>OR</b> writing out an equation to equate to the file size in bytes: <math>2 \times 10000 \times \text{number of seconds} = 1000 \times 1000</math></li> <li>• Rearranging equation to calculate number of seconds (using bits): <math>\text{number of seconds} = 1000 \times 1000 \times 8 / 16 / 10000</math> <b>OR</b> rearranging equation to calculate number of seconds (using bytes): <math>\text{number of seconds} = 1000 \times 1000 / 2 / 10000</math></li> </ul> | <p><b>3</b></p> <p><b>AO2=3</b></p> |

| Question | Part | Marking guidance | Total marks |
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| 06 | 1 | <p>To store programs/data/files while the computer/power is turned off;</p> <p><b>A.</b> For long-term storage</p> <p><b>A.</b> To transfer files between computers</p> <p><b>A.</b> To install programs/software from // to distribute software</p> <p><b>NE.</b> It is non-volatile</p> <p><b>NE.</b> Main memory / RAM loses its contents when computer/power turned off</p> | <p><b>1</b></p> <p><b>AO1=1</b></p> |
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| Question | Part | Marking guidance | Total marks |
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| 06 | 2 | <p><b>How represented (Max 3):</b></p> <p>Reflective/non-reflective areas represent 1/0 (<b>A.</b> 0/1) // transition between reflective and non-reflective areas represents 1 and continuation represents 0;</p> <p>Reflective and non-reflective areas known as bumps/lands and pits // 1/0 represented by bump/land and other binary value represented by pit;</p> <p>Data stored in one single track // a spiral track;</p> <p>Discs can be double-sided // double-layered;</p> <p><b>How read (Max 3):</b></p> <p>Read/write head moves to correct position;</p> <p>Laser shines at disc;</p> <p>Light is reflected;</p> <p>(Amount of) <u>reflected</u> light measured by sensor;</p> | <p><b>4</b></p> <p><b>AO1=4</b></p> |
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| Question | Part | Marking guidance | Total marks |
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| 07     | 1     | <table><tr><th>Result</th><th>Count</th><th>Temp</th></tr><tr><td>0</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>4</td></tr><tr><td>4</td><td>2</td><td>1</td></tr></table> <p><b>Mark as follows:</b></p> <p><b>1 mark:</b> 1<sup>st</sup> value in Result column is 0</p> <p><b>1 mark:</b> Count set to 0, then 1, then 2 and then does not change</p> <p><b>1 mark:</b> 1<sup>st</sup> value in Temp column is 1</p> <p><b>1 mark:</b> 2<sup>nd</sup> value in Temp column is 4, 3<sup>rd</sup> value in Temp column is 1 and then does not get changed</p> <p><b>1 mark:</b> 2<sup>nd</sup> value in Result column is 1 and 3<sup>rd</sup> value in Result column is 4 and then does not get changed</p> <p><b>A.</b> alternative values for 2<sup>nd</sup> and 3<sup>rd</sup> values if match 1<sup>st</sup> and 2<sup>nd</sup> values in Temp column</p> <p><b>Max 4</b> if any incorrect values in table</p> | Result | Count | Temp | 0 | 0 | 1 | 1 | 1 | 4 | 4 | 2 | 1 | 5<br><br>AO2=5 |
|--------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|------|---|---|---|---|---|---|---|---|---|----------------|
| Result | Count | Temp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |       |      |   |   |   |   |   |   |   |   |   |                |
| 0      | 0     | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |       |      |   |   |   |   |   |   |   |   |   |                |
| 1      | 1     | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |       |      |   |   |   |   |   |   |   |   |   |                |
| 4      | 2     | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |       |      |   |   |   |   |   |   |   |   |   |                |

| Question | Part | Marking guidance | Total marks |
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| 07 | 2 | <p>Find the biggest difference between the number entered by the user and the numbers in the List;</p> <p><b>A.</b> 5 instead of number entered by user</p> <p><b>NE.</b> find the highest value of Temp</p> | <p><b>1</b></p> <p><b>AO2=1</b></p> |
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| Question | Part | Marking guidance | Total marks |
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| 08 | 1 | <p><b>1 mark: <u>/title</u></b> in the correct place<br/> <b>1 mark: <u>br /</u></b> in the correct place <b>A. <u>br</u> A. <u>br/</u></b><br/> <b>1 mark: <u>ul</u></b> and <b><u>/ul</u></b> in the correct places</p> <pre> &lt;html&gt;   &lt;head&gt;     &lt;title&gt;Leap years&lt;<u>/title</u>&gt;   &lt;/head&gt;   &lt;body&gt;     &lt;p&gt;A leap year has 29 days in...&lt;<u>br /</u>&gt; ...February&lt;/p&gt;     &lt;p&gt;Recent leap years:&lt;/p&gt;     &lt;<u>ul</u>&gt;       &lt;li&gt;2020&lt;/li&gt;       &lt;li&gt;2016&lt;/li&gt;       &lt;li&gt;2012&lt;/li&gt;     &lt;/<u>ul</u>&gt;   &lt;/body&gt; &lt;/html&gt; </pre> | <p><b>3</b><br/><b>AO2=3</b></p> |
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| Question | Part | Marking guidance | Total marks |
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| 08 | 2 | <p><b>1 mark: color</b> <b>R. colour</b><br/> <b>1 mark: font-weight</b></p> <pre> &lt;p&gt;A leap year has &lt;span style = "background-color: yellow; <u>color</u>: blue; <u>font-weight</u>: bold"&gt;29&lt;/span&gt; days in... </pre> | <p><b>2</b><br/><b>AO2=2</b></p> |
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| 08 | 3 | <p><b>1 mark: B</b> &lt;img /&gt;</p> <p><b>Do not award mark if more than one box has been shaded in.</b></p> | <p><b>1</b><br/><b>AO1=1</b></p> |
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| Question | Part | Marking guidance | Total marks |
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| 09 | 1 | <p>Manage the execution of instructions // manage the fetch-execute cycle; <b>NE.</b> execute instructions</p> <p>Decode instructions;</p> <p>Control what other components should do when executing an instruction;</p> <p><b>Max 1</b></p> | <p><b>1</b></p> <p><b>AO1=1</b></p> |
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| 09 | 2 | <p>Transfer data/signals/bit patterns (from one component to another);</p> <p><b>A.</b> transfer addresses</p> <p><b>A.</b> specific components named in response</p> | <p><b>1</b></p> <p><b>AO1=1</b></p> |
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| Question | Part | Marking guidance | Total marks |
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| 09 | 3 | <p><b>1 mark:</b> NOT bar above B</p> <p><b>1 mark:</b> NOT bar above NOT A AND NOT B</p> <p><b>A.</b> NOT above A, AND gate and right hand side of AND gate</p> <p><b>1 mark:</b> + C</p> <p><b>A.</b> if underneath a NOT bar that extends too far</p> <p>Ignore the inclusion of brackets that would not affect the order of evaluation.</p> $Q = \overline{\overline{A}} \cdot \overline{\overline{B}} + C$ <p><b>Max 2 marks if any errors</b></p> | <p><b>3</b></p> <p><b>AO2=3</b></p> |
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| Question | Part | Marking guidance | Total marks |
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| 09 | 4 | 1 mark: two rows correct<br>2 marks: all four rows correct                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2<br><br>AO2=2 |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|    |   | <table><tr><th colspan="3">Inputs</th><th>Output</th></tr><tr><th>A</th><th>B</th><th>C</th><th>Q</th></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td><td>1</td></tr><tr><td>0</td><td>1</td><td>0</td><td>1</td></tr><tr><td>0</td><td>1</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>0</td><td>1</td></tr><tr><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></tr><tr><td>1</td><td>1</td><td>1</td><td>1</td></tr></table> | Inputs         |   |        | Output | A | B | C | Q | 0 | 0 | 0 | 0 | 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 | 1 |
|    |   | Inputs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |   | Output |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | B              | C | Q      |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0              | 0 | 0      |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1              |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

| Question | Part | Marking guidance | Total marks |
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|    |   |                                         |                              |
|----|---|-----------------------------------------|------------------------------|
| 09 | 5 | OR;<br>A. correct drawing of an OR gate | <b>1</b><br><br><b>AO1=1</b> |
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| Question | Part | Marking guidance | Total marks |
|----------|------|------------------|-------------|
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|           |          |                                                                                                                                                                                                                                                                                                                                                               |                                     |
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| <b>09</b> | <b>6</b> | <p>A core/processor can execute one instruction at a time // each core can process instructions independently;<br/> <b>A.</b> each core can work independently</p> <p>Multiple cores means multiple instructions can be executed at the same time;<br/> <b>NE.</b> the computer can multi-task</p> <p><b>A.</b> tasks/processes/programs for instructions</p> | <p><b>2</b></p> <p><b>AO1=2</b></p> |
|-----------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|

| <b>Question</b> | <b>Part</b> | <b>Marking guidance</b>                                                                                                                                                                                                         | <b>Total marks</b>                  |
|-----------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>09</b>       | <b>7</b>    | <p>Cache memory is faster (to access) than main memory/RAM;</p> <p>Larger cache memory means main memory/RAM needs to be accessed less frequently // there is a higher probability that data required will be in the cache;</p> | <p><b>2</b></p> <p><b>AO1=2</b></p> |

| Question | Part | Marking guidance | Total marks |
|----------|------|------------------|-------------|
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|    |   |                                                                                                             |            |
|----|---|-------------------------------------------------------------------------------------------------------------|------------|
| 10 | 1 | (Two or more) computers/devices connected/wired/linked so that they can communicate/pass data between them; | 1<br>AO1=1 |
|----|---|-------------------------------------------------------------------------------------------------------------|------------|

| Question | Part | Marking guidance | Total marks |
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|    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |
|----|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 10 | 2 | <p><b>Benefits (Max 3)</b></p> <p>Expensive/hardware resources can be shared; <b>A.</b> examples eg printer, Internet connection</p> <p>Files/documents (stored on a server) (<b>R.</b> the network) can be accessed from any computer/workstation; <b>NE.</b> data can be shared between devices</p> <p>Files/documents can be shared (by multiple users) // collaborative working is facilitated // access to shared data files/databases;</p> <p>Email/alternative services can be used for communication; <b>NE.</b> easier communication</p> <p>Centralised management of security // common login system can apply to entire network;</p> <p>Easier to backup files stored centrally / on;</p> <p>Centralised installation of software updates;</p> <p><b>Risks (Max 3)</b></p> <p>Failure of a network cable/network device/switch/the network/a server may mean files/resources cannot be accessed; <b>NE.</b> whole network will go down</p> <p>Performance may be slowed by accessing data over the network; <b>A.</b> examples eg files may load more slowly</p> <p>Virus/malware/worm may be spread across the network / spread faster;</p> <p><b>A.</b> other security threats eg phishing</p> <p><b>NE.</b> virus might attack the computer</p> <p>Hackers might use the network to hack a computer from another location // transmissions could be intercepted;</p> <p><b>A.</b> hacking can occur</p> <p><b>Max 4</b></p> | 4<br>AO1=4 |
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| Question | Part | Marking guidance | Total marks |
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|    |   |                                                                                          |                       |
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| 11 | 1 | A set of rules (to determine how devices communicate);<br><b>NE.</b> set of instructions | 1<br><br><b>AO1=1</b> |
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| Question | Part | Marking guidance | Total marks |
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|    |   |                                                                                                                                                                                                                                                                                                                                |                       |
|----|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 11 | 2 | <b>SMTP:</b> Transmit email (to/between email servers) // send (and receive) email;<br><b>R.</b> receive email<br><br><b>HTTPS:</b> To make secure web transactions ( <b>A.</b> examples) // to access web pages securely // to access web pages over an encrypted connection;<br><b>NE.</b> it is safer/more secure than HTTP | 2<br><br><b>AO1=2</b> |
|----|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|

| Question | Part | Marking guidance | Total marks |
|----------|------|------------------|-------------|
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|    |   |                                                 |                       |
|----|---|-------------------------------------------------|-----------------------|
| 12 | 1 | Link;<br><b>A.</b> Network Interface, Data Link | 1<br><br><b>AO1=1</b> |
|----|---|-------------------------------------------------|-----------------------|

| Question | Part | Marking guidance | Total marks |
|----------|------|------------------|-------------|
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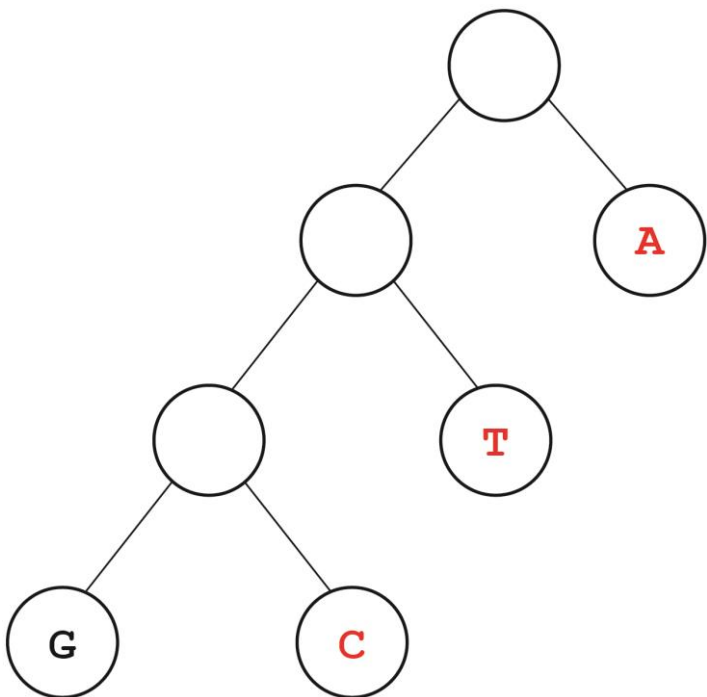
|    |   |                                                                                                                                                                                                                                       |                       |
|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 12 | 2 | Route packets across the network // select path that packets are sent across network on // address and package data for transmission;<br><b>A.</b> adds (source/destination) IP addresses<br><b>NE.</b> sends data across the network | 1<br><br><b>AO1=1</b> |
|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|

| Question                                                                              | Part                                                                               | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Total marks |     |                            |                       |                                    |                                                                                    |                                                                               |                                                                               |                            |                  |                                                                                       |                                                                          |                       |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----|----------------------------|-----------------------|------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------|------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------|
| 12                                                                                    | 3                                                                                  | <p><b>Difference (1 mark)</b></p> <p>Award <b>1 mark</b> for the statement of either side of a difference from the table.</p> <table><tr><th>TCP</th><th>UDP</th></tr><tr><td>TCP is connection-oriented</td><td>UDP is connectionless</td></tr><tr><td>TCP provides a reliable connection</td><td>UDP does not guarantee that packets will arrive (in order) // best effort protocol</td></tr><tr><td>TCP performs error recovery // packets received with errors are retransmitted</td><td>UDP does not perform error recovery // packets with errors are just discarded</td></tr><tr><td>TCP server maintains state</td><td>UDP is stateless</td></tr><tr><td>TCP has slower (effective) transmission speeds (because of error correction overhead)</td><td>UDP has faster (effective) transmission speeds (as errors not corrected)</td></tr></table> <p><b>Example Application (1 mark)</b></p> <p>Streaming // gaming // (most) DNS requests/responses;<br/><b>A.</b> any other example for which either speed is vital or reliability is relatively unimportant<br/><b>R.</b> if more than one example given and any of the examples would not use UDP</p> | TCP         | UDP | TCP is connection-oriented | UDP is connectionless | TCP provides a reliable connection | UDP does not guarantee that packets will arrive (in order) // best effort protocol | TCP performs error recovery // packets received with errors are retransmitted | UDP does not perform error recovery // packets with errors are just discarded | TCP server maintains state | UDP is stateless | TCP has slower (effective) transmission speeds (because of error correction overhead) | UDP has faster (effective) transmission speeds (as errors not corrected) | 2<br><br><b>AO1=2</b> |
| TCP                                                                                   | UDP                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |     |                            |                       |                                    |                                                                                    |                                                                               |                                                                               |                            |                  |                                                                                       |                                                                          |                       |
| TCP is connection-oriented                                                            | UDP is connectionless                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |     |                            |                       |                                    |                                                                                    |                                                                               |                                                                               |                            |                  |                                                                                       |                                                                          |                       |
| TCP provides a reliable connection                                                    | UDP does not guarantee that packets will arrive (in order) // best effort protocol |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |     |                            |                       |                                    |                                                                                    |                                                                               |                                                                               |                            |                  |                                                                                       |                                                                          |                       |
| TCP performs error recovery // packets received with errors are retransmitted         | UDP does not perform error recovery // packets with errors are just discarded      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |     |                            |                       |                                    |                                                                                    |                                                                               |                                                                               |                            |                  |                                                                                       |                                                                          |                       |
| TCP server maintains state                                                            | UDP is stateless                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |     |                            |                       |                                    |                                                                                    |                                                                               |                                                                               |                            |                  |                                                                                       |                                                                          |                       |
| TCP has slower (effective) transmission speeds (because of error correction overhead) | UDP has faster (effective) transmission speeds (as errors not corrected)           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |     |                            |                       |                                    |                                                                                    |                                                                               |                                                                               |                            |                  |                                                                                       |                                                                          |                       |

| Question | Part | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total marks                         |
|----------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 13       | 1    | <p>Award <b>1 mark</b> for the naming of a correct method:</p> <p>Blagging/Pretexting // Phishing // Pharming;<br/> <b>R.</b> phishing, pharming spelt incorrectly (eg as fishing) for this mark point but if this mistake is made, marks can be awarded for the description.</p> <p>Award up to <b>2 marks</b> for a description of the named method (do not award marks for descriptions of other methods or for descriptions if no method was named):</p> <ul style="list-style-type: none"> <li>• <b>Description of blagging/pretexting:</b> Create scenario to trick him into revealing these details; for example, by telephoning him and telling him his account has been locked and needs unlocking; <b>A.</b> other reasonable examples</li> <li>• <b>Description of phishing:</b> Send email/SMS with link for him to follow to login // send email/SMS with a request to contact the sender; which goes to a fake login page // so that the criminal can collect his login/personal details (that might help obtain the login); <b>A.</b> "message" for "SMS"</li> <li>• <b>Description of pharming:</b> <u>Redirect</u> his login to another server / website; which can collect his login details;</li> </ul> <p>Award <b>Max 2</b> marks if not answered in context.</p> <p><b>Max 3</b></p> | <p><b>3</b></p> <p><b>AO1=3</b></p> |

| Question | Part | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                               | Total marks                         |
|----------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 13       | 2    | <p>Attempting to gain access to resources/a network/a system;</p> <p>with the authority of the owners;</p> <p>without / with limited knowledge of usernames / passwords / login details / other normal means of access;</p> <p>in order to identify security weaknesses / flaws;<br/> <b>NE.</b> to ensure systems are secure</p> <p><b>Max 1</b> if neither the third or fourth mark points are made.</p> <p><b>Max 2</b></p> | <p><b>2</b></p> <p><b>AO1=2</b></p> |

| Question | Part | Marking guidance                                                                                                                                                                                                                                                                                                     | Total marks                         |
|----------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 14       | 1    | <p>To reduce file size;<br/> To reduce the time it will take to transmit data;<br/> To reduce the number of bits used to represent data;<br/> To increase the amount of data / number of files that can be stored in a certain amount of memory / on a device; <b>A.</b> examples of devices</p> <p><b>Max 1</b></p> | <p><b>1</b></p> <p><b>AO1=1</b></p> |

| Question | Part | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Total marks                         |
|----------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 14       | 2    | <p><b>1 mark:</b> A added in correct place in diagram<br/> <b>1 mark:</b> T added in correct place in diagram<br/> <b>1 mark:</b> C added in correct place in diagram</p> <p><b>Do not award the mark for a letter if it has been added in more than one place.</b></p> <p><b>Ignore values (other than A,T, C) written in the nodes that should be empty.</b></p> <p><b>Max 2 marks if any errors</b></p>  | <p><b>3</b></p> <p><b>AO2=3</b></p> |

| Question | Part | Marking guidance | Total marks |
|----------|------|------------------|-------------|
| 14       | 3    | 3;               | 1<br>AO2=1  |

| Question | Part | Marking guidance                                                                                                                                                                            | Total marks |
|----------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 15       | 1    | Smallmoney // Money // Currency // Float // Real // Decimal // Double;<br><br>A. Minor errors in spelling<br>A. Other data types that could store a non-integer numeric value<br>NE. Number | 1<br>AO2=1  |

| Question | Part | Marking guidance                                                                    | Total marks |
|----------|------|-------------------------------------------------------------------------------------|-------------|
| 15       | 2    | StudentID;<br>A. Minor errors in spelling and case and space between Student and ID | 1<br>AO2=1  |

| Question | Part   | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Total marks |        |      |       |   |      |        |   |      |                |
|----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|------|-------|---|------|--------|---|------|----------------|
| 15       | 3      | <table border="1"><thead><tr><th>Surname</th><th>BookID</th><th>Cost</th></tr></thead><tbody><tr><td>Jalal</td><td>1</td><td>4.49</td></tr><tr><td>Sklair</td><td>3</td><td>8.99</td></tr></tbody></table> <p><b>1 mark:</b> For each record listed: the fields listed are the correct ones (Surname, BookID, Cost), with the correct values and no other fields are displayed. Award this mark whether or not the records are the correct ones, so long as they have been correctly linked using the primary and foreign keys.</p> <p><b>1 mark:</b> Record for Jalal included in results.</p> <p><b>1 mark:</b> Record for Sklair included in results</p> <p>Award the two marks for having the correct records (Jalal, Sklair) regardless of which fields are shown for the records.</p> <p><b>Max 1</b> of the two marks for having the correct records (Jalal, Sklair) if any other records also included.</p> <p><b>Max 2</b> if:</p> <ul style="list-style-type: none"><li>any incorrect data included in results table</li><li>results table is incomplete</li><li>fields are included in the results table in a different order (eg BookID before Surname)</li></ul> <p><b>A.</b> Minor spelling and case errors in Surname field.</p> <p><b>A.</b> Use of different symbol to decimal point in Cost field.</p> <p><b>A.</b> Both records written on same row, so long as one is written after the other and the fields are listed in the same order for each record.</p> <p><b>I.</b> Whether fieldnames are or are not included at top of results.</p> | Surname     | BookID | Cost | Jalal | 1 | 4.49 | Sklair | 3 | 8.99 | 3<br><br>AO2=3 |
| Surname  | BookID | Cost                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |        |      |       |   |      |        |   |      |                |
| Jalal    | 1      | 4.49                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |        |      |       |   |      |        |   |      |                |
| Sklair   | 3      | 8.99                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |        |      |       |   |      |        |   |      |                |

| Question                                       | Part     | Marking guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Total marks |          |                                     |  |                                         |  |                                                |   |                                           |  |                                  |
|------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|-------------------------------------|--|-----------------------------------------|--|------------------------------------------------|---|-------------------------------------------|--|----------------------------------|
| 15                                             | 4        | <p><b>1 mark</b> for correct row ticked<br/><b>R.</b> more than one row ticked<br/><b>A.</b> use of alternative symbol than tick</p> <table><thead><tr><th>SQL Query</th><th>Tick one</th></tr></thead><tbody><tr><td>DELETE StudentID 27<br/>FROM Student</td><td></td></tr><tr><td>DELETE "Harpreet Singh"<br/>FROM Student</td><td></td></tr><tr><td>DELETE<br/>FROM Student<br/>WHERE StudentID = 27</td><td>✓</td></tr><tr><td>DELETE 27<br/>FROM StudentID<br/>IN Student</td><td></td></tr></tbody></table> | SQL Query   | Tick one | DELETE StudentID 27<br>FROM Student |  | DELETE "Harpreet Singh"<br>FROM Student |  | DELETE<br>FROM Student<br>WHERE StudentID = 27 | ✓ | DELETE 27<br>FROM StudentID<br>IN Student |  | <p><b>1</b><br/><b>AO2=1</b></p> |
| SQL Query                                      | Tick one |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |          |                                     |  |                                         |  |                                                |   |                                           |  |                                  |
| DELETE StudentID 27<br>FROM Student            |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |          |                                     |  |                                         |  |                                                |   |                                           |  |                                  |
| DELETE "Harpreet Singh"<br>FROM Student        |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |          |                                     |  |                                         |  |                                                |   |                                           |  |                                  |
| DELETE<br>FROM Student<br>WHERE StudentID = 27 | ✓        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |          |                                     |  |                                         |  |                                                |   |                                           |  |                                  |
| DELETE 27<br>FROM StudentID<br>IN Student      |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |          |                                     |  |                                         |  |                                                |   |                                           |  |                                  |