



# **0417 Past Papers**

## **ICT**

### **Chapter 9**

### **Audience**

**Teacher: Ashraf Al-Massou**

- 11 Tawara College is setting up a new website for its older students. The website will publicise the events in the college, as well as revision and sporting activities. The headteacher wants the website to be attractive to the older students and it must meet their needs.

Before the website can be produced the needs of the audience have to be taken into account.

Analyse the needs of this audience.

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11

**Eight from:**

There needs to be emoticons/clipart to grab the attention  
 The content needs to be relevant to improve their knowledge  
 There must be a balance of information and pictures with more information than pictures  
 The use of white space is less important  
 More hyperlinks to related web pages  
 Fonts must be clear and readable  
 The interface must be simple, clear and intuitive  
 Slideshows, videos and images providing more information  
 High contrast background  
 The students need to be constantly engaged  
 Needs to be interactive  
 The tone of the website needs to be casual  
 The website needs to be able to work on all platforms especially mobile ones  
 The content needs to be kept fresh and updated

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Activate Windows  
 Go to Settings to activate Windows.

[8]

**12** Discuss the disadvantages of policing the internet.

Activate Windows [6]

These are points they will need to be expanded upon to gain the mark

**Six from:**

- Removes freedom of speech
- International therefore would be difficult to police
- Laws are different in each country/state
- The dark net would increase
- Electronic crimes would move away from the internet to other places, making them harder to intercept
- Internet users can be anonymous therefore it will be difficult to track down
- Who chooses what is blocked could affect day to day browsing
- Concern that everything you do is being watched therefore privacy is lost
- Could be breaches in sending/receiving confidential/personal data as others could not see it
- Increase in cost of security
- Reduction in speed of browsing/search
- Could lead to corruption/bribery//police may use the data
- No one owns the internet so it would be impossible to police effectively
- Very expensive to police the internet as extra police force has to be set up
- As the internet is so big it is hard to keep track on all the activity
- As the internet is dynamic it would be impossible to check everything

- 8 One implication of using a computer system is that people can break the law by hacking into other computer systems. **Cultural**, **Ethical** and **Moral** implications can also be issues.

Tick (✓) the most appropriate implication for each of the following statements.

	<b>Cultural (✓)</b>	<b>Ethical (✓)</b>	<b>Moral (✓)</b>
A student has changed the contents of a company website without permission			
Writing computer games that make fun of a country's religion			
Using pictures in a document without acknowledging copyright			
Passing information to a rival company			

[4]

	<b>Cultural</b>	<b>Ethical</b>	<b>Moral</b>
A student has changed the contents of a company website without permission			✓
Writing computer games that make fun of a country's religion	✓		
Using pictures in a document without acknowledging copyright			✓
Passing information to a rival company		✓	

- 9 When software is bought, the purchaser is subject to copyright legislation.

Give **four** actions that would breach copyright legislation.

- 1 .....
- 2 .....
- 3 .....
- 4 .....

[4]

**Four from:**

Making a copy and giving it away to a friend or colleague/streaming without permission

Making a copy and lending it without permission

Making a copy and selling it without permission

Using a single copy with multiple simultaneous use on a network

Using coding from the original copy in your own programs/modifying the original code

Renting out the original copy without permission

**16** A programmer is developing a presentation of a new ICT solution for a conference and needs to consider the audience.

**(a)** Using examples, explain why presentations and ICT solutions have to take into account the type of audience.

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**(b)** The programmer is concerned that the software used for the presentation will be copied by the participants during the conference.

Describe how the software could be protected from illegal copying.

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Question	Answer	Marks
16(a)	<p>Max <b>two</b> marks, for example:  The audience could be young  The audience may be teenagers  The audience may be old</p> <p>Max <b>three</b> from:  The solution must match the age of the audience  More images, sounds, interactive with younger  More words for the older/adults  The audience experience may be greater  More content is needed for younger people to those who are older  Expectations from the audience may be different  An audience of experts would expect more from a solution  More explanation needed from someone who is not an expert</p>	<b>4</b>
16(b)	<p><b>Four</b> from:  Unique reference number/product key needs to be entered when the product is first installed...  ...the system will check for duplicated numbers  Only runs with CD-ROM/memory stick attached...  ...parts of the software are stored on the memory stick/CD-ROM  Dongle needs to be attached...  ...parts of the software are stored on the dongle</p>	<b>4</b>

7 A piece of software has been created and is protected by copyright legislation.

(a) Explain the need for copyright legislation.

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(b) Software houses have ways of preventing software copyright being broken.

Describe **four** ways that the software houses can help to prevent copyright being broken.

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3 .....

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4 .....

..... [4]

Question	Answer	Marks
7(a)	<b>Two</b> from: It helps to prevent the unauthorised copying of the software It helps to prevent the unauthorised lending/renting of the software It gives the author legal protection	<b>2</b>
7(b)	<b>Four</b> from: A license agreement between the user and the software developer A unique licence key is used when the software is installed Software only runs if DVD/CD/Pen Drive is present Use of a dongle/card plugged into the computer Holographic sticker which cannot be photocopied shows the product is real Software built into the program to stop it being copied	<b>4</b>



**12** With the increased use of the internet, software copyright rules are being broken more often.

**(a)** Explain what is meant by software copyright.

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Question	Answer	Mark
12(a)	Any <b>two</b> from: – Protection of software from being downloaded, copied, or borrowed... – ...without the owner's consent – Protects the author of the software	<b>2</b>

**(b)** Software piracy is one major consequence of the failure to comply with copyright rules.

Describe the ways software can be protected from piracy.

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12(b)	<p>Any <b>four</b> from:</p> <ul style="list-style-type: none"> <li>– When the software is bought it comes with a unique activation code...</li> <li>– ...this can only be used once and has to be typed in</li> <li>– ...on a limited number of machines</li>   <li>– Use of holograms...</li> <li>– ...this shows that the software is a real copy</li> <li>– ...holograms cannot be photocopied</li>   <li>– Use of licence agreements</li> <li>– The purchaser fills in a licence agreement</li> <li>– ...and agrees to abide by the rules</li>   <li>– Execution of the encryption code requires a key to run</li>   <li>– Use of a dongle</li> <li>– Guards hardware / software modules that have not been tampered with in any way</li>   <li>– Digital signature on the CD</li> </ul>	<b>4</b>
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- 15 Many people think there should be greater control of the use of the internet.

Describe the advantages and disadvantages of policing the internet.

[5]

Question	Answer	Marks
15	<p>Any <b>four</b> from:</p> <p><b>Advantages</b></p> <p>Helps to prevent illegal materials from being shown</p> <p>Helps to prevent pornography (for minors)</p> <p>Helps to prevent discussion groups that incite hatred, racism, etc</p> <p>Ensure copyright laws are enforced</p> <p>Remove the Dark Net</p> <p>Safeguards the vulnerable</p> <p>Any <b>four</b> from:</p> <p><b>Disadvantages</b></p> <p>Unsuitable material is easily available in other ways</p> <p>The rise of mobile communications lessens the impact of the internet</p> <p>Freedom of speech is restricted</p> <p>Very difficult to enforce as the internet spans continents</p> <p>Maximum 5 marks</p>	5

- 9 Many countries have copyright legislation which applies to the purchasing of software.

Give three actions that would break copyright.

- 1 .....
- 2 .....
- 3 ..... [3]

- 9 Three from:

Making a copy and giving it away to a friend or colleague without permission  
 Making a copy and lending it without permission  
 Making a copy and selling it without permission  
 Making a copy without permission from the author/licence holder  
 Using a single copy with multiple simultaneous use on a network  
 Using coding/images from the original copy in your own programs/modifying the original code  
 Renting out the original copy without permission [3]

- 16 Explain what is meant by copyright.

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..... [2]

- 16 Two from:

Lawful protection....  
 .....Given to authors of software /companies /publishers  
 Relates to the software/name/work the author/publisher/company created/published  
 Prohibits purchaser from making unlimited copies/lend it to others/change the software/sell software/books/intellectual property without the company's/author's permission [2]



17 (a) Explain what is meant by software copyright.

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(b) Explain how software manufacturers attempt to prevent copyright being broken.

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17 (a) Two from:

Lawful protection....  
.....given to authors/software companies and publishers  
Relates to the software the author/publisher/company created/published  
Prohibits purchaser from making unlimited copies/lend it to others/change the software/sell it  
without the company's permission [2]

(b) Two from:

Encryption of the execution code requires a key to run  
Use of a dongle  
Registration system requiring the typing in of a registration code  
"Guards" are hardware or software modules that monitor the running program and  
ensure that it has not been tampered with in any way  
Activation code which can be used only on a limited number of machines [2]