***N5 Computing Science***

**\*\*\*\*\* THIS HOMEWORK EXERCISE IS DUE FOR FRIDAY 28TH OF OCTOBER \*\*\*\*\***

1. Name the bus used to select memory locations to be read from or written to by the processor. (1)

2. State where instructions and data are held within the processor after being transferred from memory. (1)

3. Describe one typical feature of an operating system developed to support smartphones of the type shown below. (1)



4. The following HTML is used to create a web page.

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <title>GameZone – Hi-Scores</title>  </head>  <body>  <h1>Select Title</h1>  <a href=”player/hiscore-halo.html”>Halo Arena</a>  <a href=”http://halo-arena.com/index.htm”>Game Site</a>  <a href=”player/hiscore-gw.html”>Guild Wars</a>  <a href=”http://guildwars2.com/home.htm”>Game Site</a>  </body>  </html> |

(a) From the HTML above, identify an internal hyperlink and an external hyperlink. (2)

(b) This web page is stored in the root directory of the server:

“http://www.gamezone.com”.

Use this information to change one of the relative addresses used in the web page to an absolute address. (1)

(c) Draw a diagram to illustrate the navigation structure used in the web page above. (2)

(d) Describe a test that should have taken place when this web page was being developed. (1)

(e)The follow web page code has been created to ensure accessibility.

|  |
| --- |
| <a href="#maincontent">Skip navigation</a>  <img src="logo.png" alt="GameZone Logo" />  <a href="home.html">Home</a>  <a href="games.html">Games</a>  <a href="players.html">Players</a>  You are at  <a href="home.html">Home:</a>  <a href="games.html">Games:</a>  <a href="haloarena.html">Halo Arena</a>  <h1 id="maincontent">Halo Arena</h1> |

(i) Give one example, from the code above, which increases the accessibility of the web page. (1)

(ii) Explain why your example makes the page more accessible. (1)

(f) The web site provides an option for users to save pages as PDF files. Describe why PDF files may be used for this purpose. (1)

5. An app is being developed for students to use to revise for their examinations. The app will show example questions, worked answers, a study planner and the location of friends with the app who are studying the same subjects.



The icons used in the app are stored using a standard file format.

(a) State a standard file format suitable for storing these images. (1)

(b) Explain why the file size of an icon will be smaller if the colour depth is reduced. (2)

6. State the hardware that allows external hardware to be connected to a computer system. (1)

**Total: 16 Marks**