End of topic test

|  |  |
| --- | --- |
| Name: | Will Dargan |

1. State the purpose of secondary storage. [1]

|  |
| --- |
| To permanently store data for later use. |

1. State four characteristics that should be considered when choosing secondary storage devices for a given application. [4]

|  |
| --- |
| * Capacity * Price * Speed * Durability |

1. A flying hobby drone is to be fitted with a gimbal and camera. State two reasons why solid-state storage is a suitable choice, and one reason why a hard disk would be unsuitable for this application. [3]

|  |
| --- |
| * A hard drive is easily damaged. * Solid state has a large storage capacity for its size. * Solid state is very fast |

1. State what is meant by the capacity of a device. [1]

|  |
| --- |
| The amount of data that can be stored. |

1. Put the following devices in order of capacity, lowest to highest: DVD-R, CD-R, Blu-Ray™. [1]

|  |
| --- |
| CD-R, DVD-R, Blu-Ray™ |

1. Evaluate the merits of a hard disk drive or a solid-state drive to use as the secondary storage in a laptop computer. [6]

|  |
| --- |
| * A hard drive has a high capacity. * A hard drive has slower transfer speeds than solid state. * A hard drive is more easily damaged than solid state. * A hard drive is cheaper per unit storage. * A solid-state drive is much more portable than a hard drive. * For these reasons a solid-state drive would be better. |

1. Given the following assumptions:

|  |  |
| --- | --- |
| **File type** | **Approximate size** |
| 1-page word processed file with no images | 0.1MB |
| Postcard sized photograph | 6MB |
| 3-minute MP3 music file | 6MB |
| 1-minute compressed video file | 50MB |

State the storage requirements for these scenarios in **gigabytes**: [4]

|  |  |
| --- | --- |
| 200 postcard sized photographs | 1.2GB |
| An album of 21 music tracks, 3 minutes each | 0.126GB |
| Twenty 3-minute video files to be streamed over the internet | 3GB |
| 120 student essays, each three pages each with no images | 0.036GB |

**End of test**

**Total 20 marks**

**20 marks**