Name: Class: Mark:

1. (a) State what ROM stands for. [1]

(b) Explain **one** use of ROM. [2]

(c) Explain why computers also need RAM in addition to ROM. [4]

(d) When desktop computers lose power due to being turned off, they need to reboot and load the operating system again. Explain why a reboot is necessary if a computer is turned off, but not if it is suspended. [2]

2. A number of scenarios are shown in the table below.

 Tick (✓) **one** box in each row to show whether RAM or ROM would be used
for each of the given scenarios. [6]

|  |  |  |
| --- | --- | --- |
| **Scenario** | **RAM** | **ROM** |
| An MP3 currently playing in the web browser |  |  |
| A word processed document currently minimised  |  |  |
| The BIOS of the operating system |  |  |
| An email currently being written |  |  |
| Instructions on how to boot up the computer |  |  |
| A computer game that is currently being played |  |  |

3. A computer manufacturer decides to decrease the amount of RAM they include on a computer and increase the amount of virtual memory. The total amount of memory is the same as before.

(a) Describe what is meant by virtual memory. [3]

(b) Explain the effect of the computer manufacturer’s decision. [2]

[Total 20 marks]