

## 6-A-Day – Computer Science GCSE (1)

Q1	<p>Some CPUs have cache memory.</p> <p>(i) Describe what is meant by cache memory.</p>  <p>(ii) Explain why cache memory is needed.</p>  <p style="text-align: right;"><b>[4]</b></p>
Q2	<p>A shopkeeper needs software to manage the accounts of her shop. She decides to use off-the-shelf software instead of custom written software.</p> <p>Describe <b>two</b> advantages to the shopkeeper of off-the-shelf software, compared to custom written software</p> <p>Advantage 1</p>  <p>Advantage 2</p>
Q3	<p>Data stored in computers can be measured in bits, bytes and kilobytes.</p> <p>(a) State what is meant by</p> <p>(i) a bit</p> <p>.....</p> <p>..... <b>[1]</b></p> <p>(ii) a byte</p> <p>.....</p> <p>..... <b>[1]</b></p>

The questions on this worksheet have been taken from the Original OCR GCSE Computing Specimen Paper

Q4

A television set top box contains a database of television channels and programmes.

- (a) Describe what is meant by a database.

.....

..... [2]

Q5

A city has many libraries. Each library has several computers.

- (a) All the computers in a library are connected to each other through a local area network (LAN) and the libraries are connected through a wide area network (WAN).

In the table below, tick **one** box in each row to show whether the statements are true for the LAN only or for both LAN and WAN.

	LAN only	Both LAN and WAN
This can be used to check the books in another library.		
This can be used to send messages between the libraries.		
This will include a printer where users can print results of a search.		
Protocols are needed to allow the computers to communicate.		

[4]

Q6

Debbie has a program on her mobile phone, which calculates the cost of the calls she has made.

The algorithm to update the data when a new text call is made is shown below

```

PROCEDURE Update
  TotalCalls = TotalCalls + 1
  IF SameNetwork = TRUE THEN
    RunningCost = RunningCost + 0.01
  ELSE
    RunningCost = RunningCost + (CallLength * 0.10)
  END IF
END PROCEDURE Update
    
```

So far TotalCalls = 10 and RunningCost = £12.00

- (i) Debbie makes a 3 minute call to a phone on the same network.

State the values of TotalCalls and RunningCost after they have been updated using this algorithm.

TotalCalls = .....

RunningCost = ..... [2]

- (ii) Debbie now makes a 5 minute call to a phone on a different network.

State the values of TotalCalls and RunningCost after they have been updated using this algorithm.

TotalCalls = .....

RunningCost = ..... [2]