The answers on this worksheet have been taken from the Original OCR GCSE Computer Science Specimen Paper

6-A-Day – Computer Science GCSE (p1.2-2016)

Q1	Four characteristics from: • Capacity/size • Speed • Portability • Durability • Reliability • Cost	4 (AO1 1b)	1 mark is to be awarded for each correct characteristic to a maximum of 4 marks.

Q2

	RAM	ROM
Stores the boot up sequence of the Sat Nav.		✓
The contents are lost when the Sat Nav is turned off.	✓	
Holds copies of open maps and routes.	✓	

3 (AO2 1a) — Award 1 mark for each correct tick.

No marks should be awarded if ticks are in both boxes in a given row.

Q3	• A computer system that is built into another device	1 (AO1 1a)	

Q4	Three devices from: • Dishwasher • MP3 player • Washing machine • Mobile phone • Manufacturing equipment	3 (AO1 1a)	1 mark to be awarded for each correct example identified to a maximum of 3 marks. There are many other examples of devices with embedded systems which may be acceptable.

Q5

Sending;

- Bill's computer splits data into equal sizes packets (1)
- Each packet is given the address of Ben's computer (1)
- Each packet is given a number (1)
- Each packet is given error checking data (1)
- The packets are sent across the network (1)

Receiving;

- Ben's computer checks if all packets have been received? (1)
- If No…
- …Check again (1)
- …Increment timer (1)
- …If timer > max wait (1)
- …Send timeout to Bill's computer (1)

- If Yes…
- …Reorder packets based on their number (1)
- …Display the document (1)
- …Send receipt confirmation (1)
- …Each packet is checked for errors (1)…
- … if corrupt a message is sent back to sender (1)

6 (AO3 2b) — Answers must be a recognisable algorithm. Candidates can use a flow chart or any form of pseudocode.

Candidates can only be awarded a maximum of 4 marks for sending or receiving.

Q6	• A network protocol defines rules for data transmission • A network protocol defines standards for data transmission	1 (AO1 1a)	1 mark only to be awarded for a correct definition.