Chhetri Academy

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GCSE COMPUTER SCIENCE

4.1

Edexcel 1CP2 | Specification point 4.1.3

How the internet is structured (IP addressing, routers)

Untiered

Answers and examiner comments

1	2019	Untiered
question groups	available papers	tier

Using this booklet

1. Answer numbers match the companion question booklet.
2. Follow the original question number on marking tables.
3. Examiner comments are included where available.

Name _____ **Date** _____

Some entries use full source marking material in an appendix. Any unavailable mark schemes are identified beside the relevant answer.

Question Number	Answer	Additional Guidance	Mark
7(a)	A linked description to include **two** from: ● Reads the packet **header** ● Takes the recipient's address ● Compares the (recipient's) address to the addresses of all devices that are connected to it (which are stored in the router's routing table) ● Forwards the packet / network traffic **to its destination** ● Using the quickest/most efficient route.		**2**

Question Number	Answer	Additional Guidance	Mark
7(b)	An explanation such as: Changes in requirements / technology (1) mean that security can be improved/compromised (1) OR Changes in law/regulations (1) mean that requirements/technology must change (1) **Do not accept** statements about unauthorised access / security that do not refer to **changes** in requirements / technology etc.	Linked points required for two marks.	**2**

Question Number	Answer	Additional Guidance	Mark
7(c)	A description such as: Each packet has a sequence number (added at the sending end) (1) The packets are put back into (sequence) order (at the destination) (1).		**2**

Question Number	Answer	Additional Guidance	Mark
7(d)	A response to include **two linked** points, such as: ● Some children may not have devices / can afford devices (1), so the school might have to provide them (1) ● Some students will have more advanced devices (1), thereby having different learning opportunities (1) ● Screen readers / facilitating programs (1) improve access for students with disabilities (1) ● Access may not be appropriate (1) for students from some religions / cultures (1) ● Opens opportunities for access to experts (1) thereby providing for individual needs (1)		**4**