



Examiners' Report/ Principal Examiner Feedback

Summer 2014

Pearson Edexcel GCE
in Applied ICT (6959)
Paper 01 Communications and
Networks

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General Comments

After several exam series without research folders being submitted, they made a reappearance. Research folders should be retained by centres in case of a query, but they should not be sent to the marker. This is a waste of postage costs and the marker has no remit to look at any material except the actual script.

Comments on individual questions

Activity 1 - Network management tasks

(a) A document about open source software and it's possible use in the college.

Most candidates were able to give both advantages and disadvantages of open source software compared to proprietary software. A lot of the answers were rather generic however and did not really address the context of use in a college.

Most candidates failed to understand the idea of compatibility between open source and proprietary file formats. One or two marks were picked up with general statements about open and closed file formats, but few candidates looked any deeper. Only a handful said anything about the reasons for having proprietary formats or how open source developers overcome compatibility problems.

Most candidates were able to name some examples of open source software, although a significant number gave proprietary packages instead. Others named software that would be totally unsuitable for the tasks stated. Where software was both open source and appropriate, marks were often lost because candidates failed to give adequate reasons for their choices.

(b) A document about possible changeover processes in the Admin sub-domain.

The majority of answers were essentially 'bookwork'. Standard descriptions of changeover methods that were not linked to the scenario. It was clear that many candidates had simply copied chunks of researched material. Where candidates did address the scenario, too many of them dealt with the Teaching sub-domain or the whole college system, rather than the Admin sub-domain as given in the question.

For the parallel changeover method, a disturbing number of candidates submitted answers about parallel electrical circuits, indicating weak research skills and a total lack of understanding of the topic.

Activity 2 - Research, network design and benefits

An extended writing question on netbooks and tablets in the context of the scenario.

Most candidates were able to explain the differences between a tablet and a netbook. The part they found more difficult was applying that knowledge to using the devices in a college situation.

Weaker candidates tended to deal only in generalities, often failing to identify any specific makes / models as being available at the price points given.

Good candidates gave full specifications of both a tablet and a netbook at the two price points and explained the suitability of each for running the required software in context.

In between, common reasons for candidates failing to reach the top band included:

- making incorrect claims as to the capabilities of their chosen devices.
e.g. that a basic Android device could run all the required software
- failing to put the discussion into a college based context
- giving an unbalanced account by devoting most of the writing to one of the four devices.

Activity 3 – Components of a network.

Table which identifies the hardware and cabling for the LAN.

As usual, far too many candidates thought that simply repeating the list of hardware given in the question would be enough to gain the marks. Better candidates made the effort to give the required detail, makes / models of computers and printers, quantities of cable, sizes of switches, etc.

Activity 4 – Network design.

A design for the network with notes justifying each major decision.

Most diagrams were clear and well labelled, although many candidates lost marks by not indicating locations or stating which type of cable was being used. There were still instances of servers being used as hubs and of printers being attached to individual PCs rather than networked as needed.

Many candidates seemed to have a very optimistic view of wifi capabilities. It was often assumed that the manufacturer's maximum range would always be possible to achieve and that a single WAP could cope with 1 - 200 simultaneous connections.

Candidates usually missed out the classroom block and / or the classrooms in the main school building.

As in previous examinations, the notes justifying each major decision regarding the positioning of network devices and equipment, frequently ended up being notes describing the layout or repeating what the case study said should be done.

Activity 5 - Network addressing and protocols.

(a) DHCP.

This was well answered by many candidates, although there were a significant number who addressed the question of what DHCP is, not what a DHCP server does.

(b) Static and dynamic addressing.

This was poorly answered by most candidates. The common idea was that devices that didn't move should be given static addresses and those that did move should be given dynamic ones. Although this is superficially true for many of the devices being considered, it is not a sufficient explanation for a mark.

(c) Server configuration, address ranges, reservations, and leases.

Very few candidates understood DHCP configuration and the reasons for using the various settings.

Standard Ways of Working

Most candidates gained both marks. Only a handful of candidates lost one mark by including extra pages.

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