

Moderators' Report/ Principal Moderator Feedback

Summer 2016

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

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Comments on individual questions

Activity 1 – Network design

(a) A briefing document about the positioning and design of WiFi antennae

Less able students failed to consider anything other than standard, omnidirectional antennae. Better ones wrote about yagi or dish antennae but often failed to produce an adequate diagram to support their arguments.

(b) A document that discusses the relative costs of a fully WiFi solution and a WiFi plus cable solution.

Most students failed to notice the requirement for a discussion of costs and produced a discussion of the differences in technology instead. When students did try to address costs, they usually gave good arguments and scored well.

Activity 2 – Research, network management and benefits of networks

(a) An extended writing question on portable information and communication systems in the context of the scenario.

Most students were able to identify a plausible package and add-ons. Weaker students only discussed generic ideas such as a small tablet, without identifying makes, models or costs. Better students did look at these matters but often seemed to get fixed on a single solution that could not meet all of the needs. Good students suggested suitable add-ons that addressed the weaknesses of their chosen device and in most cases were able to meet all requirements.

Activity 3 – Components of a network.

A Table which identifies the hardware, cabling components and other essential equipment to be used in the network.

As in previous activities of this type, far too many students thought that simply repeating the list of hardware given in the question would be enough to gain the marks.

The question specifically stated that 'existing items need only be included if you are adding to / changing their role'. Despite this, many students wasted their time by including items with no indication of any changes.

Better students were able to suggest appropriate changes and additions. Most sets of components lost marks by not detailing suitable makes / models for the equipment suggested. Very few students showed how their choices would meet the suggested budget.

Activity 4 – Network design.

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

Most diagrams were clear and well labelled, although many students lost marks by not indicating locations or stating which type of cable was being used.

Very few students addressed the requirement to show planned WiFi coverage, most just included a few wireless access points and assumed that this would be sufficient.

As a small change from previous examinations, the notes justifying each major decision were to include 'decisions you have made to try and meet the family's requirements and / or resolve conflicts'.

Weaker students often failed to attempt this and produced the usual descriptions of what they did, without little reference as to why.

Better students did address the family's requirements and it was good to see that efforts were made to resolve conflicts and that sensible arguments were put forward to support decisions. Overall, students did better than expected on this section.

Activity 5 – Components of a network and connectivity

(a) Network Address Translation in the given context.

This was poorly answered by most students. Nearly all the answers gave a generic description of NAT, concentrating on the setting up and use from the network side, not the connection from outside of the network required by the context.

(b) The sequence of events, in order, for connecting to the network via VNC and NAT.

Very few students seemed to understand the concept of putting things in a logical order. Most marks were gained by writing about setting up client and server versions of the VNC software.

Standard Ways of Working

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

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