



Pearson

# **Examiners' Report**

## Principal Examiner Feedback

Summer 2017

Pearson Edexcel GCE Applied in Information  
and Communication Technology (6953)

The Knowledge Worker

edexcel 

## **Edexcel and BTEC Qualifications**

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at [www.edexcel.com](http://www.edexcel.com) or [www.btec.co.uk](http://www.btec.co.uk). Alternatively, you can get in touch with us using the details on our contact us page at [www.edexcel.com/contactus](http://www.edexcel.com/contactus).

## **Pearson: helping people progress, everywhere**

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: [www.pearson.com/uk](http://www.pearson.com/uk)

Summer 2017

Publications Code 6953\_01\_1706\_ER

All the material in this publication is copyright

© Pearson Education Ltd 2017

## **General Comments**

The paper was of a similar standard to previous years, producing a range of marks, which enabled candidates to demonstrate their skills in problem solving.

Candidates this year seemed to be less well prepared than in previous years. However, there were some very good work, many were poorly presented and illustrated a lack of understanding of what was required.

Many centres had candidates producing bulky scripts composed of a large number of printouts. Candidates were unable to restrict each required printout to one page.

## **Comments on individual questions:**

### **Activity 1 – understanding the situation**

(a)

Some responses to this section were quite vague, showing a limited understanding of the objective of the model. Responses were expected to show that the settings were being worked out to enable Ruth to sound like she had in the past.

(b)

Not as well accessed as in previous series, although most candidates listed seven or eight relevant points of the required ten. Points B10 to B14, on the mark scheme were rarely seen. Some candidates simply reiterated sentences from the first three paragraphs, which although relevant to setting the scene were not important to the working of the model. Where candidates listed more than ten points, credit was only given for their first ten points. More often, candidates are linking important points together in one bullet point, which is acceptable.

(c)

Candidates found this section difficult. Often, data sources were quoted as the worksheet names within the model, or the data input files. Candidates do not seem to understand what a source of information is. Most candidates did not put the information in a table, as requested; some changed the column headings to fit the information. Very few candidates were able to give a brief evaluation of the appropriateness of the data.

### **Activity 2 – completing the model**

(a) NFR(Ruth)

Most candidates correctly imported the text file into the 'NFR(Ruth)' worksheet. Many printed out the data on several sheets, rather than the single sheet required.

(b) DistA

The majority of candidates entered an appropriate VLOOKUP formula in cell B24 although ranges often omitted absolute addressing. A common error was to include absolute addressing on the offset value. There were some centres where candidates attempted to use a HLOOKUP formula, which normally failed to work.

(c), (d), (e) and (f)

The formulae required in these sections were relatively similar. Most candidates who produced a working formula in part (b) were able to do so in these sections. Again the most common error was to include absolute addressing on the offset values, which then would not replicate correctly.

(g) Difference

Many candidates entered a formula in cell B10 for the frequency difference, ignoring the instructions in the second sentence to square the difference and take the square root. Marks were awarded to those who only calculated the frequency difference. Those candidates who used ABS with the frequency difference, a neater form than that prescribed, were also given credit. Very few were unable to calculate the average of the frequency difference.

(h) Using the model

Candidates who had a working formula for frequency difference could access the first H mark. To access further H marks, candidates had to have at least a working formula for each distortion. A large number of candidates produced working solutions and obtained these marks. A minority of candidates did obtain marks where all the values were zero. Marks lost were through negative values or candidates moving on to the next question rather than running out of time.

(f) Printouts

Candidates produced more than the required seven printouts (excluding the required screenshot) were unable to gain marks. Row and column headings were often omitted, which lost candidates access to easy marks. Candidates who submitted screenshots throughout were unable to access these marks.

### **Activity 3 – Guitar**

The majority of candidates who gained marks in Activity 2 were able to obtain marks in this section.

(a), (b) and (c)

Most candidates who produced a working formula in part (a) were able to do so in these sections. Again, the most common error was to include absolute addressing on the offset values, which then would not replicate correctly.

(d) Difference (Rick)

In this section, the majority of candidates simply entered a formula in B10, which calculated the frequency difference for note F2. A few took the square root of the frequency difference, which gained no marks. Most used the AVERAGE function correctly to calculate the average frequency difference.

(b) Using the model

Candidates were unable to gain marks in this section unless their formulae in frequency difference in part (d) and distortions (DistG, DistL and DistT) were correct. Many gained full mark in this section.

### (c) Printouts

Only three printouts (excluding the screenshot of using the model) were required for this activity. Candidates producing more than the required number were unable to gain this mark.

### **Activity 4**

Titles for the report were often inappropriate for the target audience. Many candidates omitted section headers. Most candidates included an adequate introduction, although some simply quoted almost word for word elements from the scenario. Some candidates did not show a good understanding of the model, they seemed to think the spreadsheet was the device, although some did give a limited description of what the model does.

Suggestions were usually given for the settings for the simulation for Ruth's singing voice, these included screenshots from using the model, although they often did not use them to justify their findings. Some candidates omitted their suggestions for Terry's Rickenbacker guitar.

Suggestions for improvements and an evaluation of the model generally were brief. The evaluation of the model rarely included anything but change of colour, adding a menu or hiding sheets. Several candidates thought it would be better to buy another guitar and one felt that adding additional strings to the guitar they intended to use may help.

Most candidates attempting this activity were within level 1, fewer in level 2. Very few candidates managed to produce this document to level 3 standard.

### **Standard Ways of Working**

Candidates are still incorrectly assembling the evidence despite clear instructions.

