



General Certificate of Secondary Education

Design & Technology: Electronic Products 3541 Full Course *Specification*

Higher

Report on the Examination *2008 examination - June series*

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Full Course (3541)

Question 1

- (a) This was well answered with candidates able to identify a wide range of possible features for the product.
- (b) Well answered.
- (c) Wide range of alternative statements given by candidates.

Question 2

- (a) Many good responses to this question showing the candidates design ideas.
- (b) The best responses used more than one drawing in order to show the detail, such as how the LEDs are held in place, along with clear annotation. Few candidates showed a good method of fitting the LDR.

Question 3

This question was answered well showing a good understanding of the systems approach and the difference between analogue and digital signals.

Question 4

- (a) Generally well answered.
- (b) Most candidates scored well on this question. The clarity of responses showed that centres have prepared candidates for this type of question.
- (c) Well answered.
- (d) Candidates gave a range of responses to this question which showed some understanding of the functioning of the circuit.
- (e) More candidates are setting the calculation out in a structured way. Many still struggle to put the formula down.

Question 5

- (a) Well answered.
- (b) Whilst most candidates scored well, few were able to connect the operational amplifier up to control the astable.
- (c) Most candidates realised it would change the time the output was on compared to the time off. The calculation was tackled well except where candidates could not change the units to be consistent.

Question 6

(a) There were many good responses to this question. Connect the counter reset correctly seemed to present the greatest challenge. Candidates need to use a ruler to draw the connections and to ensure clarity in their response.

(b) Very few correct responses

Question 7

The responses to this type of question showed a great improvement on previous years. Wide range of presentation styles with the majority using a flowchart. More candidates referred to the inputs and outputs rather than the devices attached. Candidates should take care to ensure they can draw or write their responses in the space available.

Question 8

(a) Candidates showed a basic understanding of the impact on road safety, but failed to respond to the wider issues or consequences.

(b) The use of a camera on the back and a monitor in the cab was the most common response, however candidates did come up with some interesting ideas and suggestions.