Level 3 Digital Electronics 3 (7267-526)

e-Quals
Assignment guide for Candidates
Assignment A

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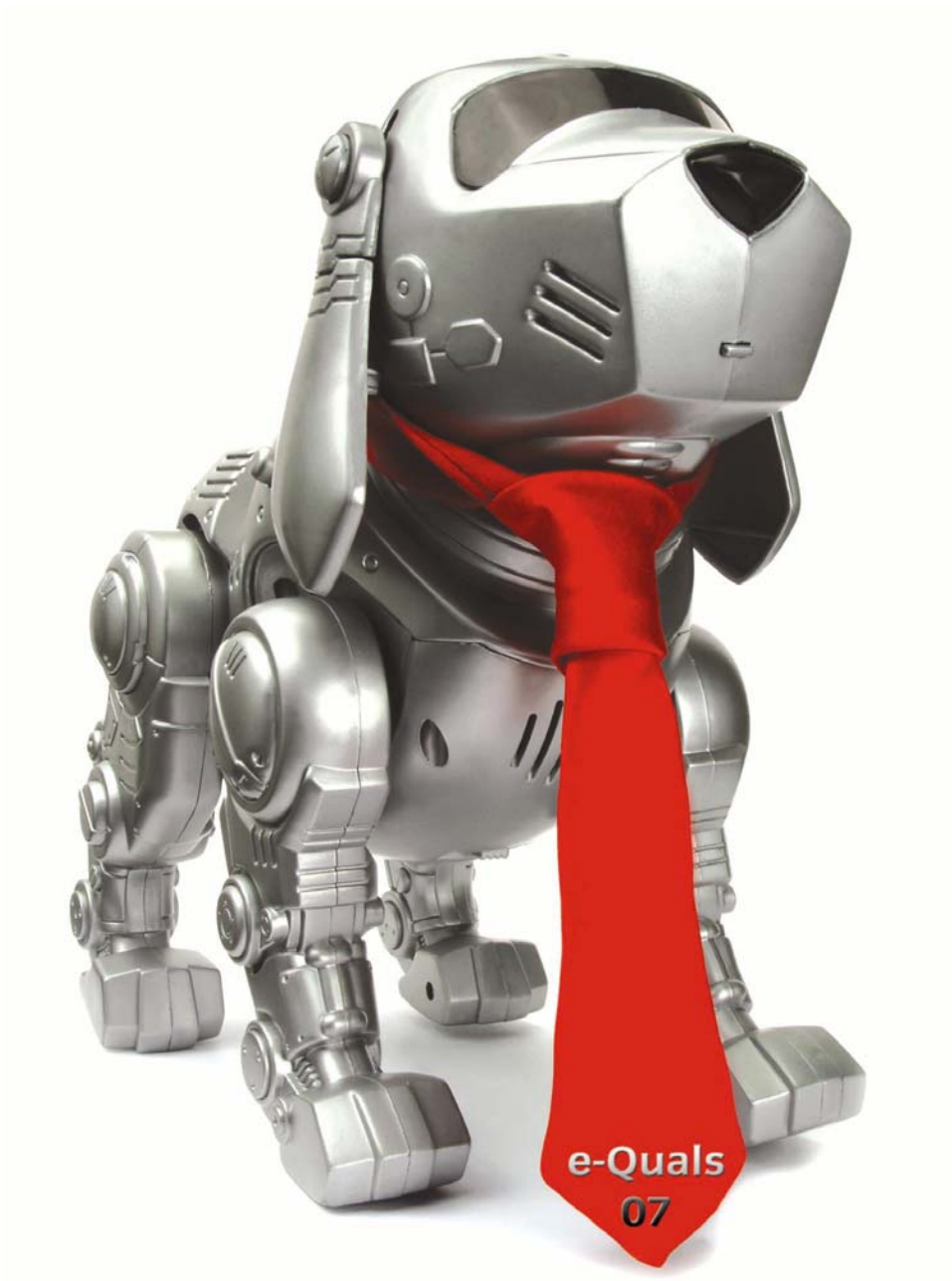

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Level 3 Digital Electronics 3 (7267-526) Assignment A

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 3 Digital Electronics 3 (7267-526).

Health and safety

You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

Time allowance

The recommended time allowance for this assignment is **3 hours**.

Level 3 Digital Electronics 3 (7267-526)

Candidate instructions

Time allowance: 3 hours

Assignment set up:

This assignment is made up of **three** tasks

- Task A – Digital encoder circuit – fault-finding
- Task B – Digital counter circuit – fault-finding
- Task C – Multiple-choice questions

Task A – Digital encoder circuit – fault-finding

You will be provided with each of the following:

- Digital encoder circuit (in a faulted condition) with instruction notes and diagrams.
- Low voltage d.c. power supply.
- Appropriate test equipment.

1 Carry out a fault-finding procedure to identify a fault to component level. Complete a report sheet in detail, showing **each** of the following:

- Initial symptoms observed.
- Tests applied.
- Test results and conclusions drawn (which should indicate what the next test should be).
- Which component is faulty.

2 Repeat Task A1 on a second board (of the same type) which has a different fault.

Task B – Digital counter circuit – fault-finding

You will be provided with each of the following:

- Digital counter circuit (in a faulted condition) with instruction notes and diagrams.
- Low voltage d.c. power supply.
- Appropriate test equipment.

1 Carry out a fault-finding procedure to identify a fault to component level. Complete a report sheet in detail, showing **each** of the following.

- Initial symptoms observed.
- Tests applied.
- Test results and conclusions drawn (which should indicate what the next test should be).
- Which component is faulty.

2 Repeat Task B1 on a second board (of the same type) which has a different fault.

Task C – Multiple-choice questions

Your assessor will now give you a multiple-choice answer sheet containing **seven** multiple-choice questions. Answer **all** of the questions and hand your answer sheet back to your assessor.

When you have finished working:

- Sign each document above your name and label all removable storage media with your name.
- Hand all paperwork and removable storage media to your assessor.

If the assignment is taken over more than one period, all paperwork and removable media must be returned to the test supervisor at the end of each sitting.

End of assignment

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