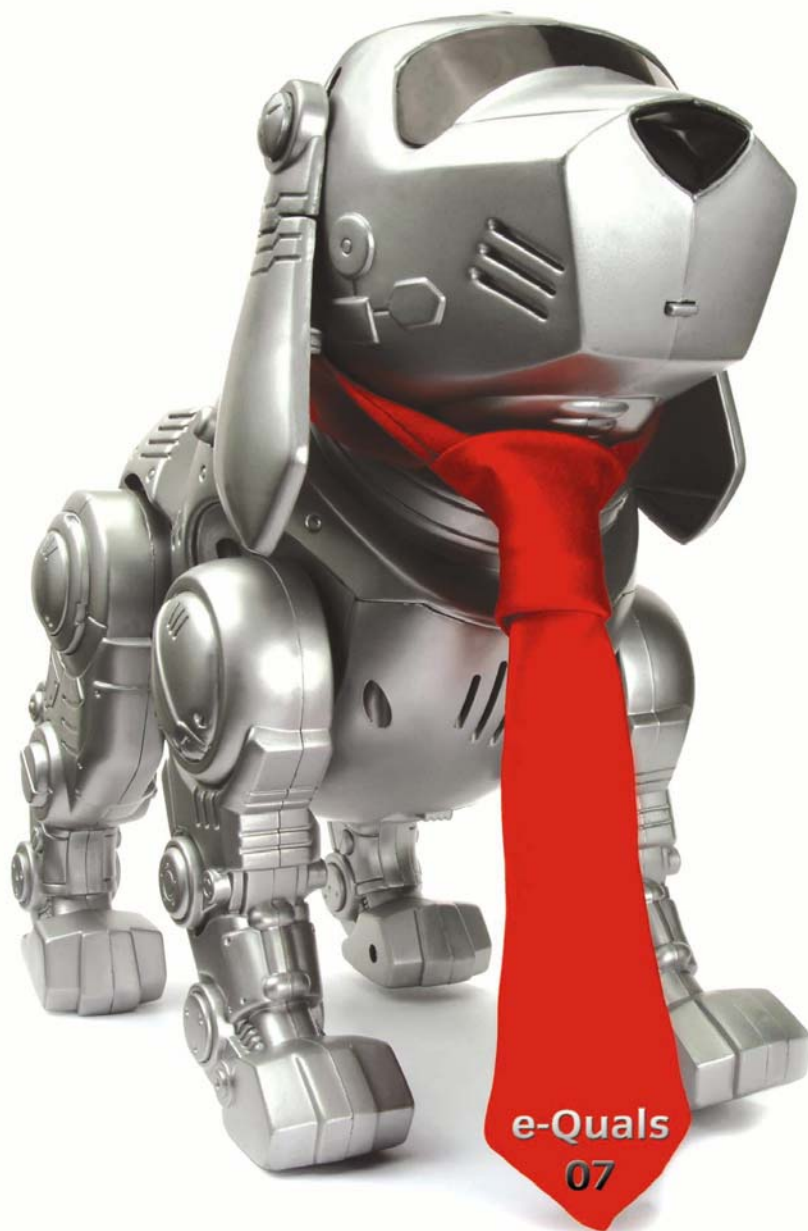


Level 3 Digital Electronics 3 (7267-526)

e-Quals
Assignment guide for Candidates
Assignment A



About City & Guilds

City & Guilds is the UK's leading provider of vocational qualifications, offering over 500 awards across a wide range of industries, and progressing from entry level to the highest levels of professional achievement. With over 8500 centres in 100 countries, City & Guilds is recognised by employers worldwide for providing qualifications that offer proof of the skills they need to get the job done.

City & Guilds Group

The City & Guilds Group includes City & Guilds, ILM (the Institute of Leadership & Management) which provides management qualifications, learning materials and membership services, NPTC which offers land-based qualifications and membership services, and HAB (the Hospitality Awarding Body). City & Guilds also manages the Engineering Council Examinations on behalf of the Engineering Council.

Equal opportunities

City & Guilds fully supports the principle of equal opportunities and we are committed to satisfying this principle in all our activities and published material. A copy of our equal opportunities policy statement is available on the City & Guilds website.

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute 2010 and may not be copied, reproduced or distributed without prior written consent.

However, approved City & Guilds centres and learners studying for City & Guilds qualifications may photocopy this document free of charge and/or include a locked PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching learners working towards a City & Guilds qualification, or for internal administration purposes
- learners may copy the material only for their own use when working towards a City & Guilds qualification

The *Standard Copying Conditions* on the City & Guilds website also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Publications

City & Guilds publications are available on the City & Guilds website or from our Publications Sales department at the address below or by telephoning +44 (0)20 7294 2850 or faxing +44 (0)20 7294 3387.

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

City & Guilds

1 Giltspur Street

London EC1A 9DD

T +44 (0)20 7294 2800

F +44 (0)20 7294 2400

www.cityandguilds.com

learnersupport@cityandguilds.com

Contents

Level 3 Digital Electronics 3 (7267-526)

| | |
|---|---|
| Introduction – Information for Candidates | 2 |
| Candidate instructions | 3 |

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

**Published by City & Guilds
1 Giltspur Street
London
EC1A 9DD
T +44 (0)20 7294 2468
F +44 (0)20 7294 2400
www.cityandguilds.com**

**City & Guilds is a registered charity
established to promote education
and training**