Level 3 Analogue Electronics (7267-525)
e-Quals
Assignment guide for Candidates
Assignment A
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About this document
This assignment comprises all of the assessment for Level 3 Analogue Electronics (7267-525).

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.
Time allowance: 3 hours

Assignment set up:

This assignment is made up of three tasks

- Task A – Switch mode power supply – fault-finding
- Task B – Multi-stage (a.f.) amplifier – fault-finding
- Task C – Multiple-choice questions

Task A – Switch mode power supply – fault-finding

You will be provided with each of the following:

- Switch mode power supply (in a faulted condition) with instruction notes and diagrams.
- Low voltage d.c. power supply (15 – 30V).
- 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 – multi-stage (a.f.) amplifier – fault-finding

You will be provided with each of the following:

- Multi-stage audio amplifier (in a faulted condition) with instruction notes and diagrams.
- Low voltage d.c. power supply (15 – 30V).
- 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 nine 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