Level 2 Fibre optic cabling in an internal environment (7540-225)

Systems and Principles
Assignment guide for candidates

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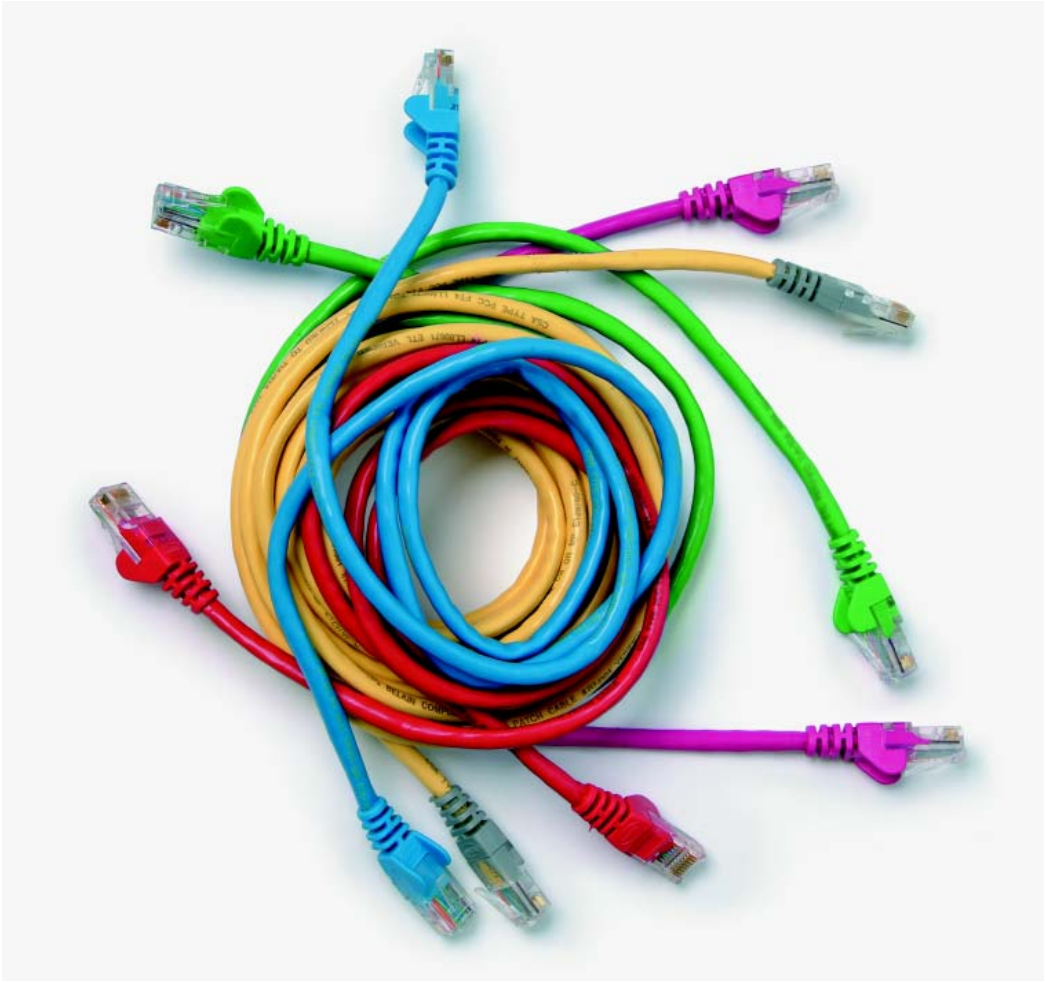

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Level 2 Fibre optic cabling in an internal environment (7540-225)

Candidate Instructions

You are advised to read all instructions carefully before starting work. Check with your assessor, if necessary, to ensure that you have fully understood the process.

You must, at all times, observe all relevant health and safety precautions.

You should be aware of the manufacturer's calibration requirements. Please note that test equipment may need a user reference prior to use.

You may use any of the tools, materials and equipment provided.

There is a time limit of four hours for this assignment.

Introduction

This assignment is broken down into three parts.

Task A requires you to interpret installation plans, and identify cables and equipment in accordance with the plans.

Task B requires you to prepare fibre optic cable for termination and to assemble a fibre optic link.

Task C requires you to operate test equipment, test a fibre optic link, interpret and record test results, and rectify faults.

Task A

You are required to interpret the installation plan provided by your assessor and identify the correct cables and connectors to be used. You must ensure that at least two different termination methods are used, one of which must be pot and polish.

Task B

You are required to install a fibre optic link to meet the requirements specified in the installation plan.

After terminating the fibre with connectors, and before starting Task C, check with your assessor. Your assessor will assess the quality of the end faces before allowing you to complete Task C.

Task C

You are required to test and accurately record test results as follows:

- calculate a loss budget for the fibre optic link
- test fibre continuity using a visible light source
- identify fibre breaks using a visible fault locator
- measure the link loss using appropriate equipment
- compare the test results with the calculated loss budget to determine if the link performance is acceptable
- demonstrate link performance testing using OTDR techniques.

Test results should be recorded.

- **At the conclusion of this assignment, hand all paperwork to your assessor.**
- **Ensure that your name and enrolment number are on all documentation.**

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