

Aleksandar Sucic

Assignment 1

Section A

1. An excellent interpretation of the problems that additional loading can create when trying to use existing circuitry and circuit protection.

You have correctly used tables of reference from the current edition of BS7671 and applied the necessary calculations for current demand.

You have explored using up-to-date LED technology as the most sensible and suitable alternative to older fluorescent type lighting.

2. A very good evaluation of the necessity for effective communication and planning. Liaison between the various tradespeople who will have to be on site to complete work such as this is essential and you have explored this well.

3. A clear and effective evaluation of the cost implications involved in upgrading the lighting and socket outlet work. You have correctly considered the replacing of the CCU to current standards. Good work.

Section B

4. A clear and accurate diagram of the connection of CTs used for high current metering purposes. Good work.

5. An excellent record of the sequence of tests involved in the commissioning process of new and upgraded electrical work.

Correct application of British Standards and HSE guidance relevant to test equipment and test leads/probes.

Correct reference to the current IET guidance for inspection and testing of electrical installations.

Correct evaluation of the use of IET forms for certification and reporting.

6. You have correctly explored the types and use of electrical test equipment. Reference to an approved voltage tester is included. This is a vital item of test equipment and ensures that safe isolation is achieved when working on electrical circuits.

7. An excellent evaluation of earth fault loop impedance testing, calculation and requirements. Correct reference to disconnection times and EFLI values.

Section C

8. A clear and accurate diagram of a key switch and contactor arrangement used to switch a large lighting load.

9. A very good evaluation of the procedure used to locate and repair a breakdown in a fluorescent lamp circuit.

10. A very good evaluation of how effective planning is essential in ensuring that a system of work is followed correctly. You have considered a back up supply to be used if necessary.

11. A clear diagram illustrating the Delta/ Star 11kV/440V transformer arrangement.

12. Clear illustrations of how single and three-phase supplies are connected for various types of electrical load.

Overall Feedback

Overall, this is an excellent assignment. Your referencing and bibliography is very good. There are, however, a few typing errors in your work which can give certain words and terminology a different meaning. Please be aware of this moving forward. Your diagrams appear to be mostly hand drawn. I would have preferred that these had been drawn created electronically. However, this does not detract from this being a very good assignment. Well done.

Assignment 2

Section A

A successful practical assessment.
Excellent Layout, Circuit and Wiring diagrams, planning and materials lists.
A very good demonstration of practical testing and interpretation of test results. Very good work.

Section B

1. An excellent interpretation of selectivity/ discrimination between protective devices.
Effective use of BS7671 Tables in demonstrating disconnection times proving selectivity.
Clear explanation given regarding operating properties of circuit breakers under fault and overload conditions.

2. Accurate line diagrams illustrated for a variety of circuits.

Overall Feedback

A very good assignment overall. Your practical work was thorough and the rig functioned correctly following your commissioning exercise.
Your use of test equipment was very good as was your interpretation of test results.
Good referencing and Bibliography. Well done Aleks.