

LEVEL 4 ASSESSMENT SPECIFICATION

Student name:	Aleksandar Sucic	Student ID number:	2221717
Programme:	HNC Electrical and Electronic Engineering		
Module:	Design of Electrical Installations		
Module code:	PCEE4007	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Steven Evans	Internal Verifier:	Nigel Richards
Assignment Title:	Commercial Office Installation.	Word count (or equivalent):	2000
Submission deadline:	15 th May 2024	Return date of provisional marks & written feedback:	22nd May 2024
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark. Penalties for late submission: Up to one week late, maximum mark of 40%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Module Learning Outcomes (from module syllabus)

LO1, LO2

TASK DESCRIPTION

Assignment 2 - 2023/ 2024

This assessment has been designed in TWO parts: Section A and Section B.

Answer all questions

Section A deals with the design, installation and testing of a Ring Final Circuit and requires the student to design and then construct the circuit using the accessories provided.

Section B requires the student to answer ALL the questions with detailed statements and fully labelled diagrams where possible.

Wiring with multicore cables

Multicore cables (commonly referred to as flat twin and earth (FTE) or PVC/PVC cables) used in standard circuit installations are three-core cables consisting of a line, a neutral and an earth conductor. Both the line and neutral conductors are copper insulated with coloured insulation; brown for line and blue for neutral. The earth being a non-insulated bare copper conductor sandwiched between the line and neutral and is known as the C.P.C. – Circuit Protective Conductor. The three conductors are encased in a PVC outer sheathing.

All cables used in electrical installations in the United Kingdom must be BASEC approved.

In this practical exercise you are requested to install and test a PVC/PVC wiring installation which shall comply with good codes of practice and the current IET Wiring Regulations.

The Layout diagram shows a Ring Final Circuit with spurs and a fused spur controlling a two-way switched lighting circuit. From the diagram, estimate the materials required and complete the requisition sheet. You will also need to complete the tools and equipment sheet.

Before carrying out the practical exercise you must complete a circuit diagram and a wiring diagram on the relevant sheets.

On completion of the practical exercise, carry out the required tests in the correct sequence according to the IET Wiring Regulations and record on the test sheet.

Commercial Office Installation

Design of Electrical Installations

HNC Electrical/Electronic Engineering & Instrumentation Engineering

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Table of Contents

Section A	1
Work Plan/ Method Statement	1
Tools List	1
Materials List	2
Test Results	2
Layout Diagram of a Ring Final Circuit with Spurs and a Switched Fused Spur Controlling a 3-way Switched Lighting Circuit	3
Circuit Diagram of a Ring Final Circuit with Spurs and a Switched Fused Spur Controlling a 2-way Switched Lighting Circuit	4
Wiring Diagram of a Final Ring Circuit with Spurs and a Switched Fused Spur Controlling a 2-way Switched Lighting Circuit	5
Section B	6
1	6
a) The fuses in Figure 1 are BS88 Type 2.	6
b) Explain what is meant by thermal and magnetic tripping properties with regard to protective devices.	8
2	9
Create similar line diagrams for the following circuits:	9
a) Lighting point controlled by two-way switching	9
b) Two lighting points switched together and controlled by two-way and intermediate switching.	9
c) Six x 1 gang 13A BS1363 switched socket outlets wired as a radial final circuit.	10
d) Thermostatically Controlled heater wired from a double-pole switch.	10
Bibliography	11
Citations	12

Section A Table of Figures

Figure A1 - Layout Diagram of Circuit Drawn using AutoCAD	3
Figure A2 - Photograph of Circuit Installation.....	3
Figure A3 - Circuit Diagram of Ring Final Circuit Drawn using AutoCAD.....	4
Figure A4 - Wiring Diagram of Ring Final Circuit Drawn using AutoCAD.....	5

Section B Table of Figures

Figure 1 - System Layout with Fault.....	6
Figure 2 - Table shows Operation Time of 3.5 Seconds for Fuse A (The institute of Engineering and Technology, 2020)	7
Figure 3 - Table shows Operation Time of 0.12 Seconds for Fuse B (The institute of Engineering and Technology, 2020)	7
Figure 4 - Left Picture Showing Bimetallic Strip Under Normal Condition, Right Picture Showing Bimetallic Strip Under Large Current (PAKTECHPOINT, 2020)	8
Figure 5 - Magnetic Circuit Breaker Trip Mechanism (PAKTECHPOINT, 2020).....	9
Figure 6 - Line Diagram of Lighting Point Controlled by a Dimmer Switch Protected by a Fuse.....	9
Figure 7 - Line Diagram of Lighting Point Controlled by Two-way Switching Drawn on AutoCAD ...	9
Figure 8 - Line Diagram of two Lighting Points Switched Together and Controlled by Two-way and Intermediate Switching Drawn on AutoCAD.....	9
Figure 9 - Six x 1 13A Gang Socket Outlets Wired as Radial Final Circuit Drawn on AutoCAD	10
Figure 10 - Thermostatically Controlled Heater with a Double Pole Switch Drawn on AutoCAD ...	10

Section A

Time Allowed: 120 Minutes

Work Plan/ Method Statement

Before starting the work, the area must be free from hazards, such as trip hazards from bags etc, all the bags are placed on tables and chairs and no slip hazards are present, additionally to protect from flying and dropped objects, overalls with protective glasses and steel toe boots are worn.

Before installation, it is important to plan out the layout of the equipment on the circuit. By placing the wooden worksurface on the table and measuring then marking out the layout of the circuit, where the equipment will go and the route the cables will go so the cable clips can be installed.

Once planned, the worksurface can be mounted and secured onto the wall, The Customer Consumer Unit (CCU), all metal sockets and light fitting and junction box components are screwed onto the worksurface with the use of phillips head screwdrivers. Using a tape measure, I measured the distances between each component, wrote it down and cut out the cables to the measurements using cable clippers.

Once all the cables were cut to size, using cable clips and a hammer they were clipped onto the worksurface as marked. After the cables were in place, the ends were stripped using cable clippers. The bare copper earth cables are sheathed with a yellow and green PVC sheath. The wires were then terminated into their corresponding terminals. Once the wires are in a simple visual and tug test shows any wires that may be loose.

A resistance test is carried out to ensure all the wires are connected to the correct terminals and that the circuit is wired correctly. RCD and MCBs are tested to ensure that the circuit breakers operate as required, this can be done by applying a fault to the circuit and measuring the reaction time of the protection device. The final test is a polarity test, all the measurements and results are reported in the 'Test Results' section.

Tools List

Phillips head and flat head screwdrivers, electric cordless drill

Pliers

Cable side cutters

Hammer

Metal rule, engineers square, Tape measure

pens, pencils

1m spirit level

Voltage indicator & proving device kit, Fluke 1662 Multifunction Tester

Materials List

Consumer Unit

40A RCD (Residual Current Device)

16A MCB (Miniature Circuit Breaker)

2 x Lamps

1 x Junction Box

1 x Intermediate switch

4 x Socket Outlets

1 x Fused Spur

2 x Two Way Switch

1mm, 2.5mm Cable Clips, screws

2.5mm² Twin and Earth Flat Cable

1mm² Twin and Earth Flat Cable

1mm² Three core and earth.

Test Results

Visual Inspection

Pass Fail

Continuity of CPC

Test Lead Resistance = Null
(R₁ + R₂) = 0.15Ω

Insulation Resistance

Test Voltage Applied = 500V
Min. Acceptable Value = 1MΩ

Line to Neutral Value = >500MΩ

Line to CPC Value = >500MΩ

Neutral to CPC Value = >500MΩ

30mA RCD Test ½ x FAIL
 1x 16.6ms
 2x 11.1ms

Polarity Test

Pass Fail

Comments

The installation and testing were completed successfully and in line with standards. To test the circuit resistance in the sockets, a loop was created by connecting the outgoing neutral to the incoming line and the outgoing line to the incoming neutral. Continuity test ensures continuity is correct for line, neutral and CPC, and that earth fault path is low resistance to test protective devices, using low resistance ohmmeter, test line to line, cpc to cpc and neutral to neutral. A test of CPC in figure 8 arrangement in each socket was carried out.

Layout Diagram of a Ring Final Circuit with Spurs and a Switched Fused Spur Controlling a 3-way Switched Lighting Circuit

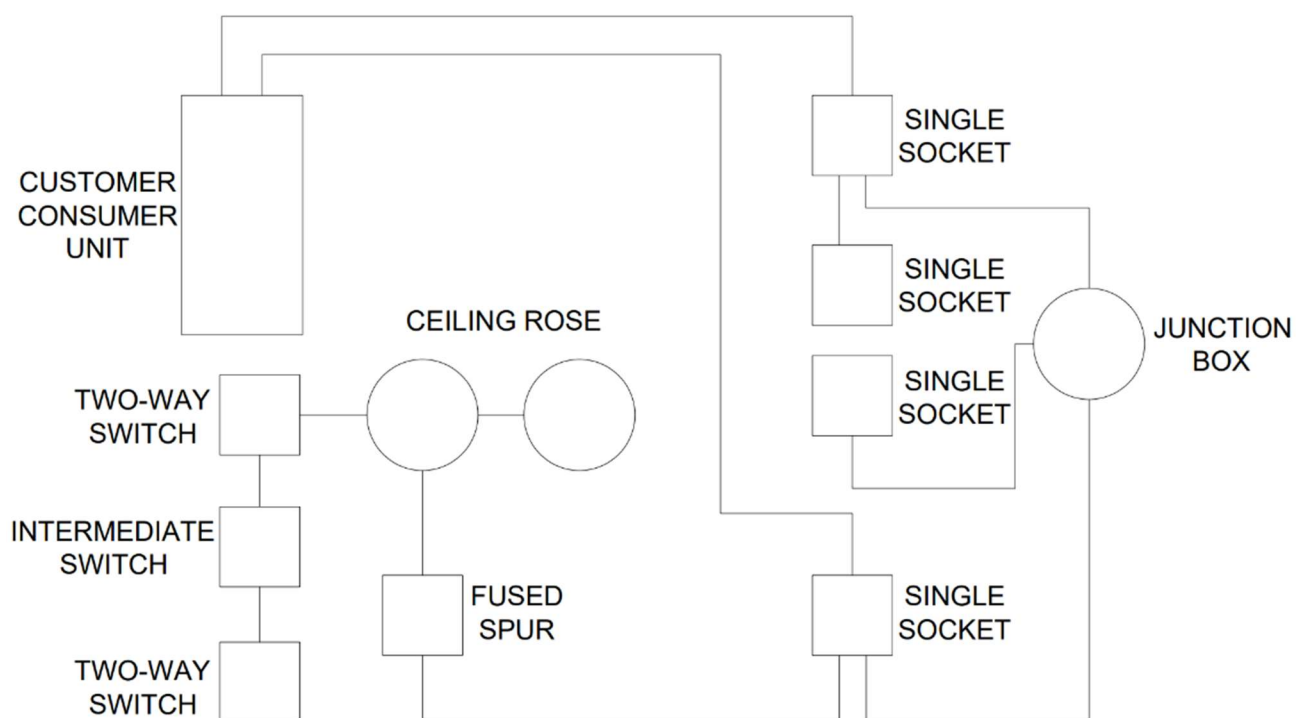


Figure A1 - Layout Diagram of Circuit Drawn using AutoCAD

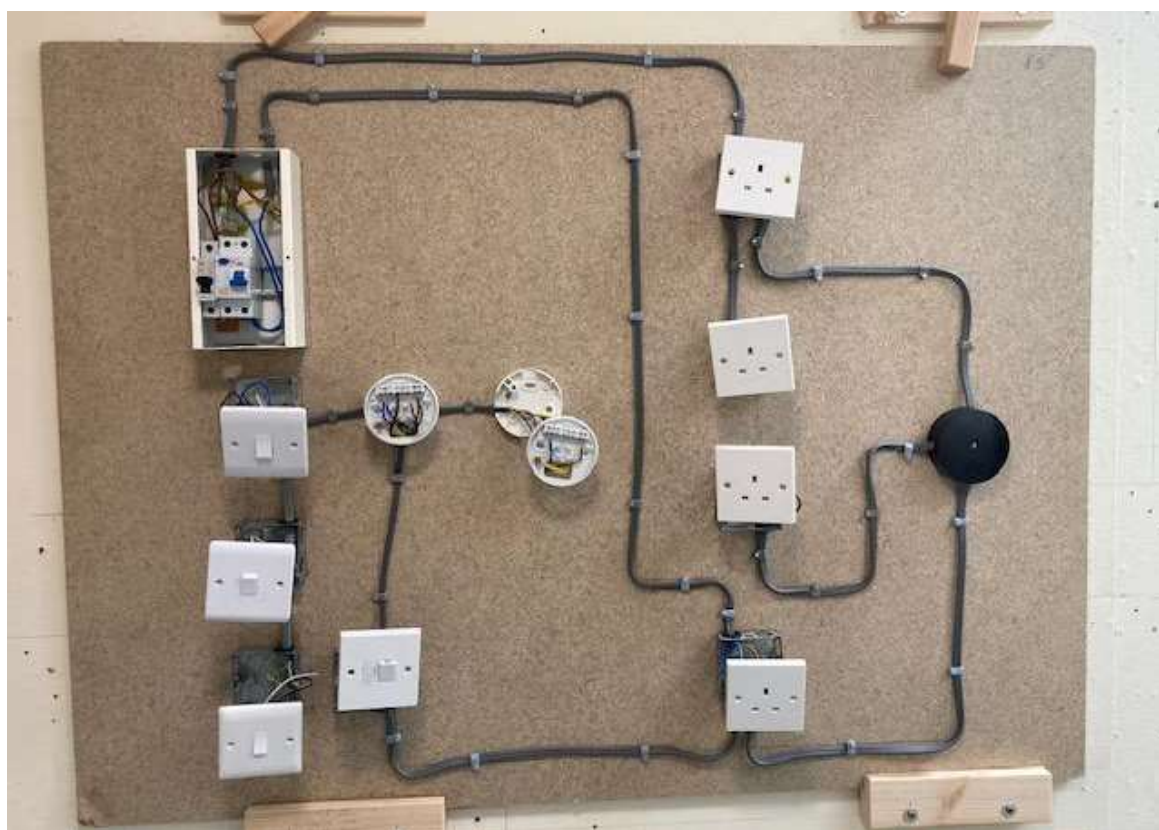


Figure A2 - Photograph of Circuit Installation

Circuit Diagram of a Ring Final Circuit with Spurs and a Switched Fused Spur Controlling a 2-way Switched Lighting Circuit

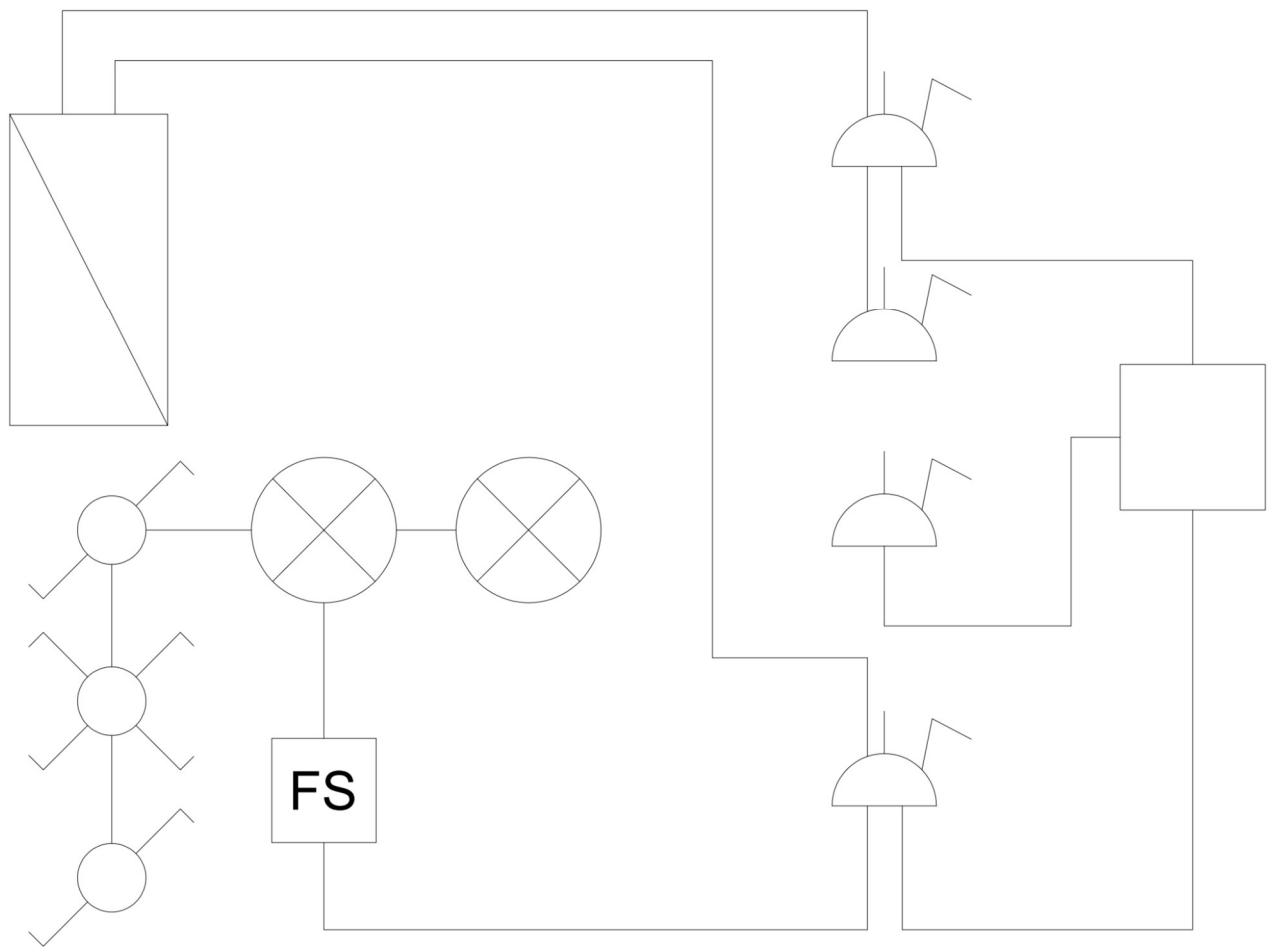


Figure A3 - Circuit Diagram of Ring Final Circuit Drawn using AutoCAD

Wiring Diagram of a Final Ring Circuit with Spurs and a Switched Fused Spur Controlling a 2-way Switched Lighting Circuit

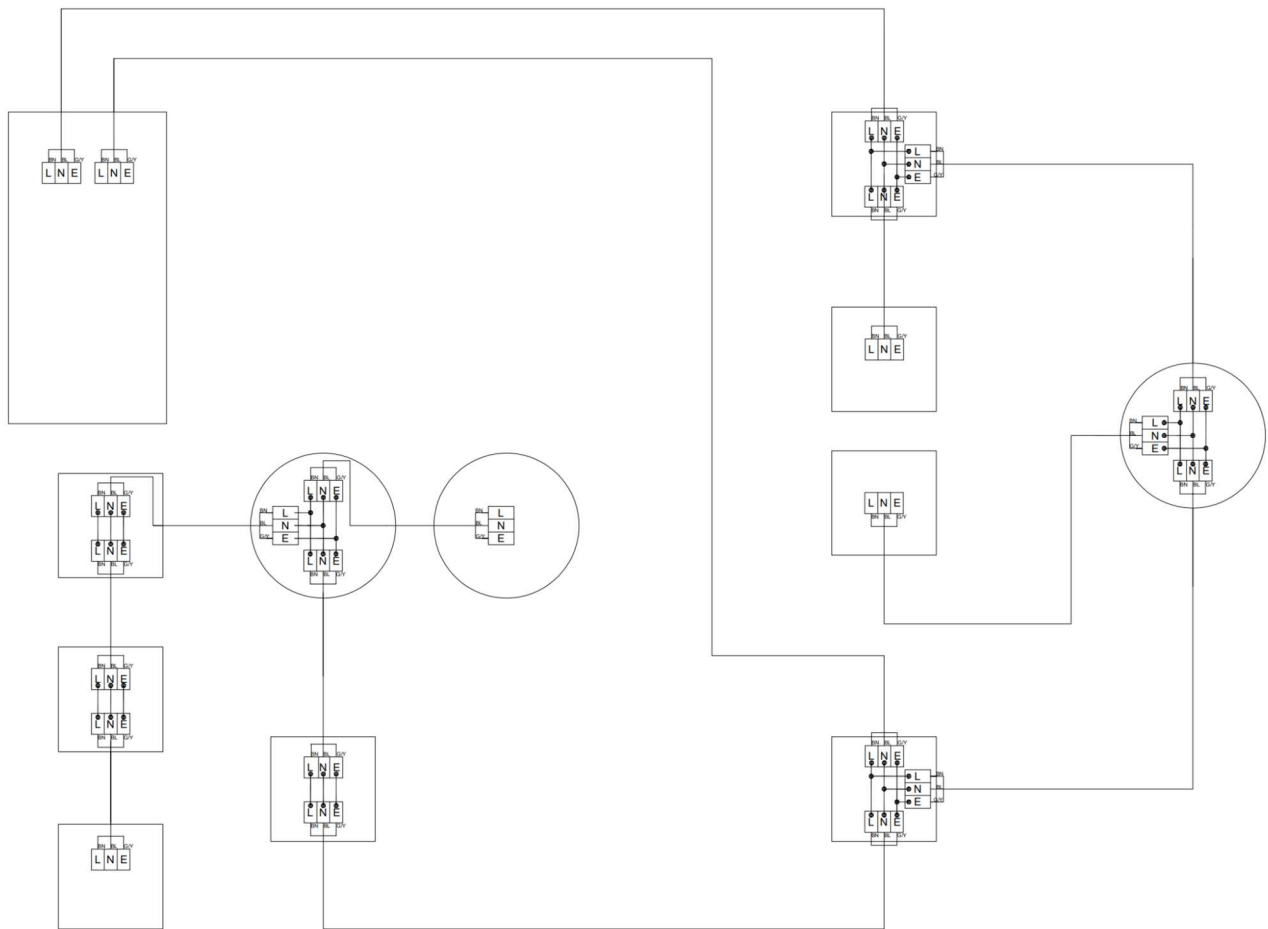


Figure A4 - Wiring Diagram of Ring Circuit Drawn using AutoCAD

Section B

1.

a) The fuses in Figure 1 are BS88 Type 2.

(i) **Explain why it is important to achieve discrimination between fuses A and B.**

Discrimination is important in order for the protective devices to operate correctly in relation to each other in order to protect the rest of the circuit. Discrimination is the “coordination of automatic protection devices in such a manner that a fault appearing at a given point in a network is cleared by the protection device installed immediately upstream of the fault, and by that device alone.” (Schneider, 2024) Discrimination in **Figure 1** would ensure that fuse B disconnects and prevents Fuse A from tripping and therefore protects the rest of the circuit. Discrimination takes place when the protection device closest to the fault activates. If the B fuse trips and the A fuse doesn't then the system has discriminated correctly. If there was a lack of or no discrimination and the B fuse does not disconnect the circuit, the fault would cause the A fuse to trip, therefore losing the rest of the circuit and causing unwanted interruptions.

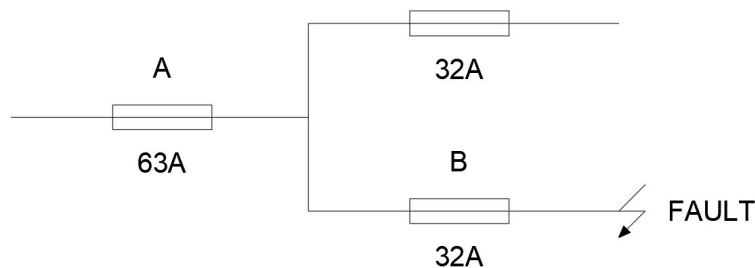


Figure 1 - System Layout with Fault

(ii) **By considering the time-current characteristics of fuses A and B, determine the disconnection times caused by a fault current of 300A and state if discrimination is achieved.**

BS7671:2018 Requirement for Electrical Installation provides tables for time current characteristics for the A and B fuses rated 63A and 32A respectively. By using these tables, one can find the disconnection times of the fuses for a fault current of 300A.

Figure 2 shows that Fuse A rated at 63A will operate within 3.5 seconds and **Figure 3** shows Fuse B rated at 32A will operate within 0.12 seconds when the 300A fault current is applied, these times have been marked in red in their respective tables. The Light blue represents the 300A fault current. Discrimination is achieved because Fuse B has a short disconnection time, therefore the fault current is stopped at the closest upstream protective device and should not reach fuse A and disrupt the circuit.

Fig 3A3(b) – Fuses to BS 88-2 fuse systems E and G

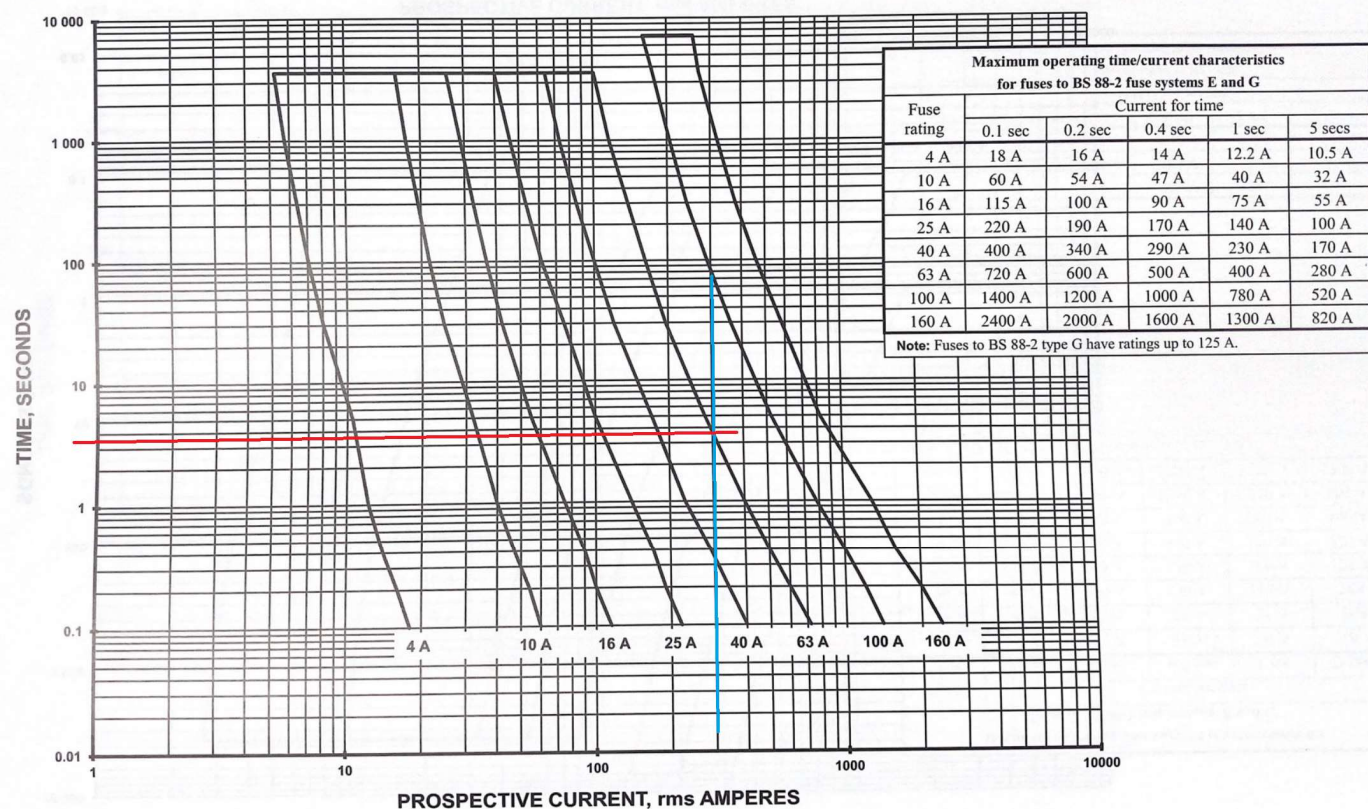


Figure 2 - Table shows Operation Time of 3.5 Seconds for Fuse A (The institute of Engineering and Technology, 2020)

Fig 3A3(a) – Fuses to BS 88-2 fuse systems E and G

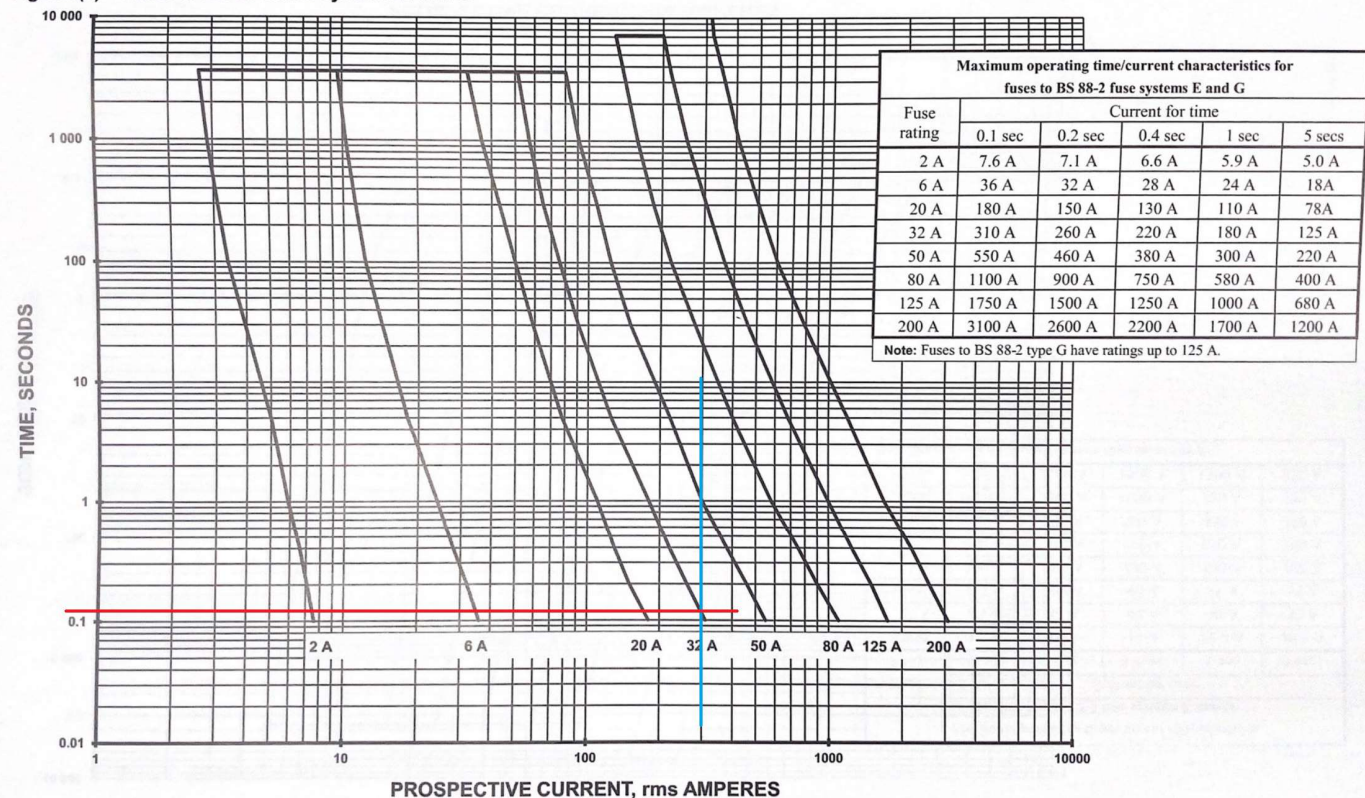


Figure 3 - Table shows Operation Time of 0.12 Seconds for Fuse B (The institute of Engineering and Technology, 2020)

b) Explain what is meant by thermal and magnetic tripping properties with regard to protective devices.

The Thermal tripping properties in protective devices works by monitoring temperatures on incoming currents. If the inrush current exceeds the threshold current set on the protective device, the switch will open therefore disconnecting the circuit. The thermal conductor does this by using a bimetallic strip. Under normal working condition the strip is straight meaning it can't reach the latch and cut contact to the circuit. When a large current passes through the wire, the bimetallic strip on the line will heat up. "The heat produced by the overload current is utilized to heat the bimetallic strips." (Sharma, n.d.) As the strip is heated it starts bending, once bent it moves the latch holding a spring-loaded contact, breaking contact with the circuit. As the bimetallic strip cools back down it moves the latch will not be able to move the contact, it has to be reset manually. The process of the bimetallic strip heating and breaking contact is shown below in **Figure 4**.

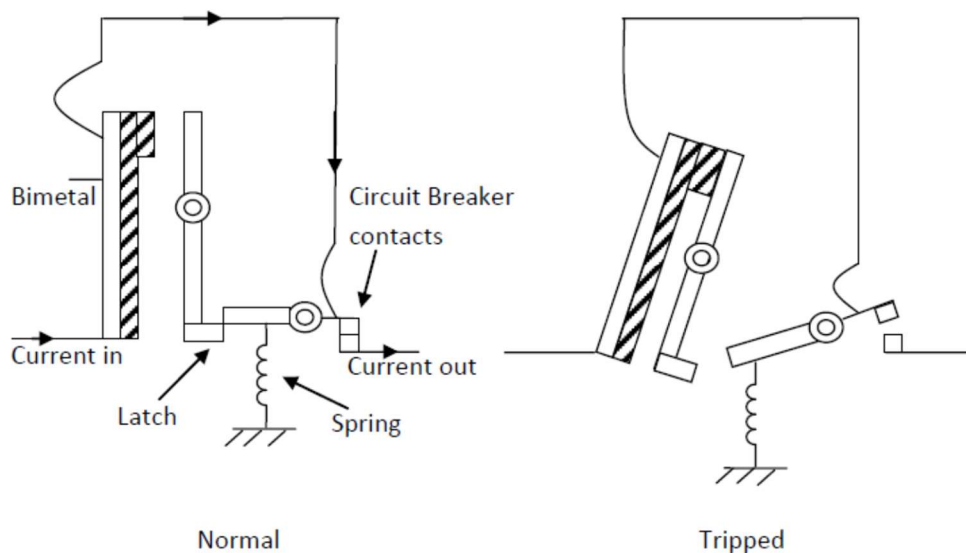


Figure 4 - Left Picture Showing Bimetallic Strip Under Normal Condition, Right Picture Showing Bimetallic Strip Under Large Current (PAKTECHPOINT, 2020)

Magnetic Circuit breakers work in a similar method to Thermal circuit breakers in that the latch holds a spring-loaded contact in place until it trips. The method involves an iron core with an electromagnetic coil wrapped around it, electromagnetic forces are created as the current runs through the coil, under normal conditions the electromagnetic force isn't large enough to reach the armature holding the latch in place. Once a larger current runs through the coils, the electromagnetic field increases and pulls the armature towards it pulling the latch and operating the spring operated contact, opening the contact to the circuit. When the current drops it releases the armature, but the contact has to be manually connected and latch put back in place to hold it, the Circuit breaker can't automatically reset itself.

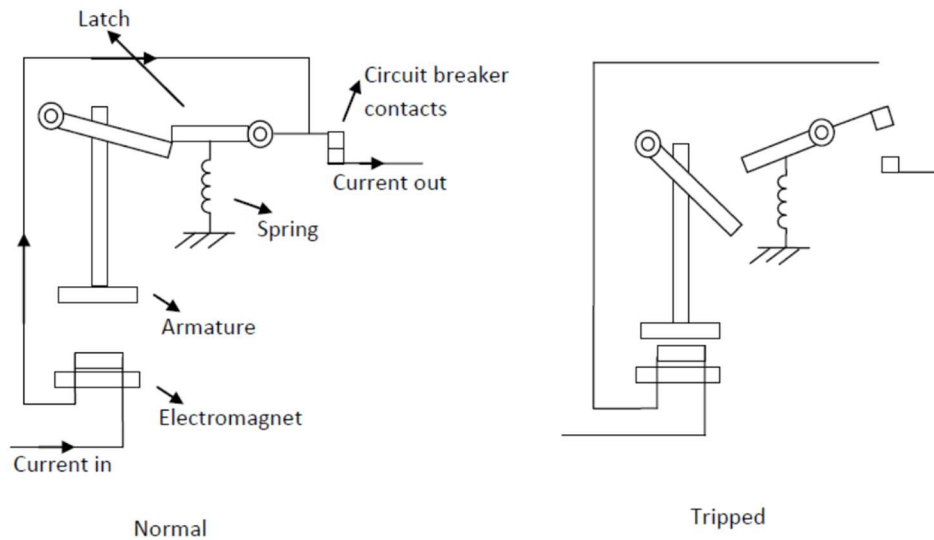


Figure 5 - Magnetic Circuit Breaker Trip Mechanism (PAKTECHPOINT, 2020)

2.

The illustration below shows a line diagram that illustrates a typical lighting point controlled by a dimmer switch and protected by a fuse.

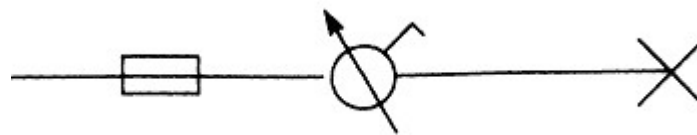


Figure 6 - Line Diagram of Lighting Point Controlled by a Dimmer Switch Protected by a Fuse

Create similar line diagrams for the following circuits:

a) Lighting point controlled by two-way switching.

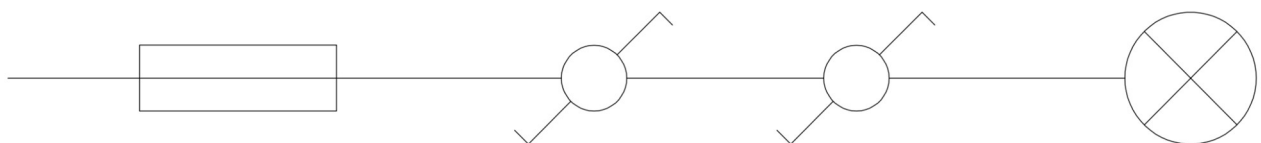


Figure 7 - Line Diagram of Lighting Point Controlled by Two-way Switching Drawn on AutoCAD

b) Two lighting points switched together and controlled by two-way and intermediate switching.

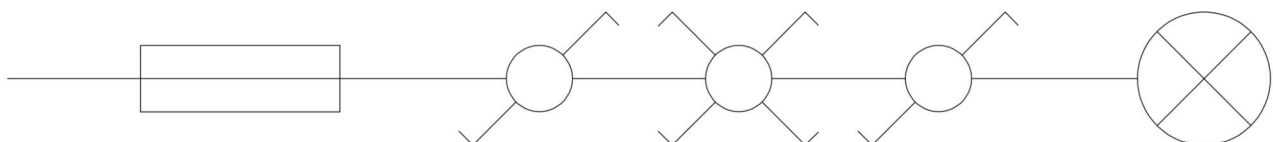


Figure 8 - Line Diagram of two Lighting Points Switched Together and Controlled by Two-way and Intermediate Switching Drawn on AutoCAD

c) Six x 1 gang 13A BS1363 switched socket outlets wired as a radial final circuit.

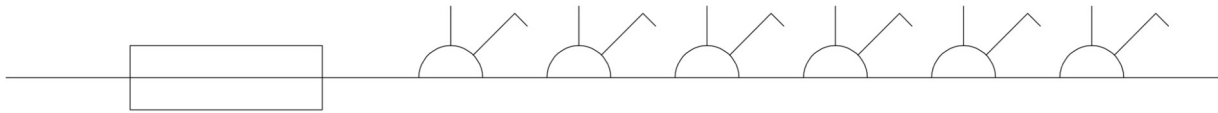


Figure 9 - Six x 1 13A Gang Socket Outlets Wired as Radial Final Circuit Drawn on AutoCAD

d) Thermostatically Controlled heater wired from a double-pole switch.

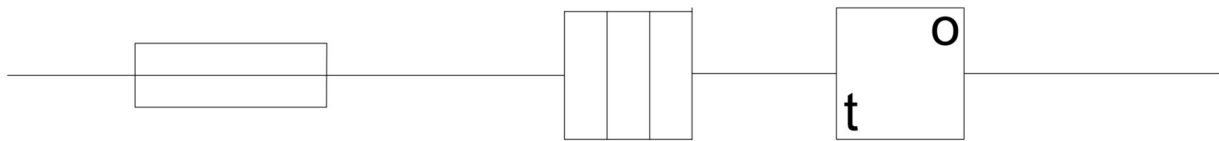


Figure 10 - Thermostatically Controlled Heater with a Double Pole Switch Drawn on AutoCAD

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Citations

PAKTECHPOINT (2020) *Overcurrent Protection Devices: Electrical System Design*, PAKTECHPOINT. Available at: <https://paktechpoint.com/overcurrent-protection-devices-electrical-system-design/> (Accessed: 10 May 2024).

Schneider (2024) *Protection discrimination*, Schneider Electric. Available at: [https://www.studiecd.dk/EL2012/pdfs/9_selektivitetstabeller/Pages from Selektivitet coordination.pdf](https://www.studiecd.dk/EL2012/pdfs/9_selektivitetstabeller/Pages_from_Selektivitet_coordination.pdf) (Accessed: 05 May 2024).

Sharma, A. (12AD) *Thermal overload relay working principle*, Your Electrical Guide. Available at: <https://www.yourelectricalguide.com/2018/02/thermal-overload-relay-working-principle.html#:~:text=The%20function%20of%20a%20thermal,or%20indirectly%20through%20current%20transformers.> (Accessed: 10 May 2024).

The Institution of Engineering and Technology (2022) *Requirements for electrical installations: IET Wiring Regulations: BS7671:2018*. 18th edn. London, United Kingdom: The Institution of Engineering and Technology.

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

NOTE: The guidance offered below is linked to the five generic assessment criteria overleaf.

1. Engagement with Literature Skills

Your work must be informed and supported by scholarly material that is *relevant* to and *focused* on the task(s) set. You should provide evidence that you have accessed an appropriate *range* of sources, which may be academic, governmental and industrial; these sources may include academic journal articles, textbooks, current news articles, organisational documents, and websites. You should consider the *credibility* of your sources; academic journals are normally highly credible sources while websites require careful consideration/selection and should be used sparingly. Any sources you use should be current and up-to-date, mostly published within the last five years or so, though seminal/important works in the field may be older. You must provide *evidence* of your research/own reading throughout your work, using a suitable referencing system, including in-text citations in the main body of your work and a reference list at the end of your work.

Guidance specific to this assessment: You must provide evidence of individual research with respect to the area of study and provide relevant referencing.

2. Knowledge and Understanding Skills

At level 4, you should be able to demonstrate knowledge of the underlying concepts and principles associated with your area(s) of study. *Knowledge* relates to the facts, information and skills you have acquired through your learning. You demonstrate your *understanding* by interpreting the meaning of the facts and information (knowledge). This means that you need to select and include in your work the concepts, techniques, models, theories, etc. appropriate to the task(s) set. You should be able to explain the theories, concepts, etc. to show your understanding. Your mark/grade will also depend upon the *extent* to which you demonstrate your knowledge and understanding.

Guidance specific to this assessment: Your report and presentation should show you gained knowledge of the subject area.

3. Cognitive and Intellectual Skills

You should be able to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of your subject(s) of study. You should be able to evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work. Your work must contain evidence of logical, analytical thinking. For example, to examine and break information down into parts, make inferences, compile, compare and contrast information. This means not just describing what! But also justifying: Why? How? When? Who? Where? At what cost? You should provide justification for your arguments and judgements using evidence that you have reflected upon the ideas of others within the subject area and that you are able to make sound judgements and arguments using data and concepts. Where relevant, alternative solutions and recommendations may be proposed.

Guidance specific to this assessment: Your report should show sound judgements and arguments related to the scenario and your responses to tasks.

4. Practical Skills

At level 4, you should be able to apply the basic underlying concepts and principles to evaluate and interpret these within the context of your area of study. You should be able to demonstrate how the subject-related concepts and ideas relate to real world situations and/or a particular context. How do they work in practice? You will deploy models, methods, techniques, and/or theories, in that context, to assess current situations, perhaps to formulate plans or solutions to solve problems, or to create artefacts. This is likely to involve, for

instance, the use of real world artefacts, examples and cases, the application of a model within an organisation and/or benchmarking one theory or organisation against others based on stated criteria.

Guidance specific to this assessment: Your report and presentation of practical work should indicate a level of research with respect to the application and deployment of the equipment, materials or processes that form the basis of the area of study.

5. Transferable Skills for Life and Professional Practice

Your work must provide evidence of the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility. This includes demonstrating: that you can communicate the results of your study/work accurately and reliably, and with structured and coherent arguments; that you can initiate and complete tasks and procedures, whether individually and/or collaboratively; fluency of expression; clarity and effectiveness in presentation and organisation. Work should be coherent and well-structured in presentation and organisation.

Guidance specific to this assessment: Your work should be well organised and presented in a professional manner.

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
A very well-written assignment. Reads clearly and is presented well.	25	20
2. Knowledge and Understanding Skills		
A clear knowledge and understanding of electro-technology across the assignment.	25	20
3. Cognitive and Intellectual Skills		
A well-presented assignment. Answers are composed well with clear and definitive explanations.	20	18
4. Practical Application Skills		
Practical work is to a very good professional standard.	20	18
5. Transferable Skills for Life and Professional Practice		
All work to industry standard in compliance with BS7671:2018.	10	8

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)

Late Submission Penalties (tick if appropriate)

Up to 1 week late (40% Max)

Over 1 week late (0%)

84 %

GENERIC ASSESSMENT CRITERIA

Level 4

In accordance with the Framework for Higher Education Qualifications, at the end of Level 4 students will be expected to have demonstrated knowledge of the basic underlying concepts and principles of a subject, and an ability to evaluate and interpret these within the context of that area of study. They should be able to present, evaluate and interpret qualitative and quantitative data in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of their subject(s) of study. They will have learned how to evaluate different approaches to solving problems, and will be able to communicate the results of their study/work accurately and reliably, and with structured and coherent arguments. They will be able to undertake further training and develop new skills within a structured and managed environment and will have the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility.

Level 4	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
Engagement with literature (including reading, referencing, academic conventions and academic honesty)	Little or no evidence of reading and/or reliance on inappropriate sources. Views and findings mostly unsupported and non-authoritative. Referencing conventions used incoherently or largely absent.	Poor engagement with essential reading. No evidence of wider reading. Reliance on inappropriate sources, and/or indiscriminate use of sources. Heavily reliant on information gained through class contact. Inconsistent and weak use of referencing.	Engagement with a limited range of mostly relevant and credible sources but with some reliance on information gained through class contact. Some omissions and minor errors. Referencing conventions evident though not always applied accurately or consistently.	Engagement with an appropriate range of literature, including sources retrieved independently. Some over-reliance on texts rather than other sources. Referencing may show minor inaccuracies or inconsistencies.	Engagement with a wide range of literature, including sources retrieved independently. Selection of relevant and credible sources. Generally sound referencing, with no/very few inaccuracies or inconsistencies.	Engagement with an extensive range of relevant and credible literature. Consistently accurate application of referencing.	Exceptional engagement with an extensive range of relevant and credible literature. High-level referencing skills consistently applied.
Knowledge and understanding (Knowledge of the basic underlying concepts and principles of a subject.)	Major gaps in knowledge and understanding of the basic underlying concepts and principles of the subject matter. Inclusion of irrelevant material. Substantial inaccuracies.	Gaps in knowledge of the basic underlying concepts and principles, with flawed or superficial understanding. Some significant inaccuracies and/or irrelevant material.	Limited knowledge and understanding of the basic underlying concepts and principles within the subject area. Some elements may be missing.	Knowledge of the basic underlying concepts and principles is accurate with a good understanding of the field of study but lacks depth and/or breadth.	Competent knowledge of the basic underlying concepts and principles. Exhibits very good understanding.	Excellent knowledge and understanding of the basic underlying concepts and principles of the subject.	Exceptional, detailed knowledge and understanding of the basic underlying concepts and principles

Level 4	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
Cognitive and intellectual skills (Evaluate underlying concepts and principles of a subject and interpret qualitative and quantitative data in order to develop lines of argument and make sound judgements.)	Wholly or almost wholly descriptive work. Little or no evaluation of the underlying concepts and principles. Failure to develop arguments, leading to illogical or invalid judgements. Minimal or no use of evidence to back up views.	Largely descriptive work, with superficial evaluation of the underlying concepts and principles. Weak interpretation of data, flawed development of arguments and judgements. Information accepted uncritically, uses generalised statements made with scant evidence and unsubstantiated opinions. Ideas sometimes illogical and contradictory.	Limited attempt at evaluation of the underlying concepts and principles, tending towards description. Can interpret qualitative and quantitative data but with some errors. Some evidence to support emerging arguments and judgements but these may be underdeveloped or with a little inconsistency / mis-interpretation.	Good evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data, with minor errors. An emerging ability to use evidence to support the argument. Mostly valid arguments and logical judgements.	Sound evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data accurately. Ability to devise arguments using evidence to make mostly appropriate and valid judgements.	Excellent evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data accurately and with some insight. Excellent ability to devise arguments using evidence and make appropriate and valid judgements.	Exceptional evaluation of the underlying concepts and principles based evidence. Outstanding interpretation of qualitative and quantitative data. Exceptional ability to devise arguments using evidence and make wholly appropriate and valid judgements.
Practical skills (Different approaches to solving problems in particular contexts.)	Limited or no use of taught, basic methods, materials, tools and/or techniques. Little or no appreciation of the context of the application. Very weak evidence of different approaches to problem-solving in particular contexts.	Rudimentary application of taught, basic methods, materials, tools and/or techniques but without consideration and competence. Flawed appreciation of the context of the application. Weak evidence of different approaches to problem-solving in particular contexts.	An adequate awareness and mostly appropriate application of basic methods, materials, tools and/or techniques. Basic appreciation of the context of the application. Can identify problems in particular contexts and propose basic alternative approaches or solutions though there may be errors.	A good and appropriate application of basic methods, materials, tools and/or techniques. Clear appreciation of the context of the application. Good evidence of different approaches to problem-solving in particular contexts and proposes mostly appropriate solutions.	A very good application of a range of basic methods, materials, tools and/or techniques. Very good consideration of the context of the application. Very good evidence of different approaches to problem-solving in particular contexts and proposes	An advanced application of a range of taught, basic methods, materials, tools and/or techniques. The context of the application is well considered, and insightful. Excellent evidence of different approaches to problem-solving in particular contexts and proposes	Exceptional levels of application and deployment skills in particular practical contexts. Outstanding identification of problems in particular contexts and formulation of wholly appropriate, thoughtful solutions / different approaches.

Level 4	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
					appropriate solutions.	appropriate solutions.	
Transferable skills for life and professional practice (Communicate the results of their study/work accurately and reliably, and with structured and coherent arguments; the qualities needed for employment requiring the exercise of some personal responsibility within a structured and managed environment.)	Work is poorly structured, disorganised, inaccurate and/or confusingly expressed. Very weak use of language and/or very inappropriate style. Failure to work effectively individual or as part of a group. Little or no evidence of the skills for employment requiring the exercise of some personal responsibility.	Work is poorly presented in a disjointed manner. It is loosely, and at times incoherently, structured, with information and ideas often poorly expressed. Weak use of language and/or inappropriate style. Flawed approach to individual or group work, meeting only partial obligations to others. Limited evidence of the skills for employment requiring the exercise of some personal responsibility.	Mostly ordered presentation and structure in which relevant ideas / concepts are reasonably expressed. Work may lack coherence and/or accuracy in places. Can work as part of a group, meeting most obligations to others but perhaps with limited involvement in group activities. Demonstrates the basic skills for employment requiring the exercise of some personal responsibility, with some areas of minor weakness.	Mostly coherent, organised and accurate work, in a suitable structure and is for the most part clearly expressed. Can work effectively independently and/or as part of a team, with clear contribution to group activities. Demonstrates the skills for employment requiring the exercise of some personal responsibility, with some areas of strength and some of minor weakness.	Work is accurate, coherent, fluent, well-structured and organised. Can work effectively independently and/or as part of a team, with very good contribution to group activities. Demonstrates very good skills for employment requiring the exercise of some personal responsibility, with just occasional minor weakness.	Work is coherent, very fluent and is presented professionally. Can work effectively independently and/or as part of a team, with an excellent contribution to group activities. Demonstrates excellent skills for employment requiring the exercise of some personal responsibility with an appetite for further development.	Work is accurate, exceptionally coherent, very fluent and presented well. Can work effectively independently and/or as part of a team, with an exceptional contribution to group activities. Demonstrates exceptional skills for employment requiring the exercise of some personal responsibility with an appetite for further development.

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