

LEP ASSESSMENT REVIEW

FOR

SURNAME: _____

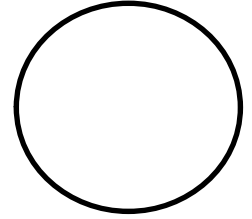
NAME: _____

ASSESSMENT DATE: _____

Candidate: _____

Assessor: _____

Final Mark



NOTE: Question 1 is a negative marking system. Start with 35 marks and marks are deducted from 35 if mistakes or omissions are made. Zero (0) mark is the minimum mark for question 1.

Q1 Relates to Wiring of Meter Board, Switchboard and Distribution Board (35 marks)

Type of Installations

Incorrect installation wired

<input type="checkbox"/>
<input type="checkbox"/>

Correct Installation Installed

The type of supply installed does not match the Installation requested

Maximum Demand Calc.

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Correct Maximum Demand Calculated

Incorrect table used for MD calculation

Incorrect FSC MD

Incorrect Sub-Mains MD

Incorrect Total MD

Incorrect balance of MD across 3 phase

Mains / Sub Mains Cable Size

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Mains / Sub Mains Cable Size Correct

Consumer Mains over size

Consumer Mains under size

Sub - Mains over size

Sub - Mains under size

Incorrect standard/table/column used for cable selection

Cable size units omitted or incorrect

Main Earth Cable Size

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Main Earth Cable Size Correct

Main Earth over size

Main Earth under size

Main Earth under recommended Min size (WR 5.3.3.2)

Consumer Mains - Unmetered

Underground Pit

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Underground Pit Labelled Correctly

Address label not on the U/G cables

Address does not include House/Lot No, Street, Suburb

Mains Box

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Mains Box Connections Correct

Consumers Mains Actives Not installed as per manufacturer instructions

Consumers Mains Neutral Not installed as per manufacturer instructions

Meter Box

Supply Fuses

- Supply Fuses Wired Correctly
- Installed with O/H Consumer Mains
- Incorrectly wired (must use top and bottom terminal of fuse)
- Phase sequence not as per SIR requirements
- Not installed with U/G Consumer Mains

Meter wiring

- Meter Wiring Correct
- Line and Load actives not installed as per SIRs - Meter Panel wiring requirements
- Active conductor used as Meter neutral
- Meter neutral Not in accordance with SIR requirement (7.5.1.3) - (Minimum size - 4mm²)

Neutral link

- Neutral Link Wired Correctly
- Consumer mains incoming Neutral not connected under Clamp terminal
- Neutral Link not used

Cable Tie

- Cable Tie Installed Correctly
- All hinged cables not under cable tie and tied to the Meter Panel
- Cable installed but too loose to stop cables from pulling through cable tie

Address label

- Address label on Meter Panel Correctly
- Address does not include House/Lot No, Street, Suburb and spelt correctly
- Address label not provided on the Meter Panel as per SIRs

Underground Details

- Underground Details Correct
- Underground cable plan & details not provided
- Underground cable plan & details not provided as per instructions or incomplete

Switch Board / Distribution Board

MEN Connection

- MEN Link Installed Correctly
- MEN not installed
- MEN under single screw on Neutral / Earth Bar
- MEN under two screws on Neutral/Earth bar but only one screw tightened
- MEN under size
- MEN in incorrect position on Neutral / Earth Bar and not labelled

Main Earth installation

- Main Earth Installation Correct
- Not installed in a manner to be free from the likelihood of mechanical damage or becoming displaced, and secured to prevent stress on the termination (i.e. large loop at Earth Clip)
- No earth clip used / Earth clip not used in accord with manufactures instructions
- Main Earth install on Earth bar under single screw
- Main earth under two screws on Earth bar but only one screw tightened
- No Main Earth wire installed
- Earth Electrode location not identified at the Main Switchboard (wording must be Earth Electrode)
- "Do not disconnect" tag not installed as per the WR requirements

Main Switch / Switches / O/L protection on Consumers Mains

- Main Switch / Switches / O/L protection on Consumers Mains Correct
- Main switch not provided

<input type="checkbox"/>	Main Switch incorrect rating
<input type="checkbox"/>	No / incorrect over load protection of the Consumers Mains
Main switch / Isolator switch labels	
<input type="checkbox"/>	Main Switch / Isolator Switch Labelled Correctly
<input type="checkbox"/>	Not Provided
<input type="checkbox"/>	Main Switchboard, Distribution Board MCB labelled as Isolator / Main Switch
<input type="checkbox"/>	FSC Loads labelled as Main Switches
<input type="checkbox"/>	Distribution board isolator labelled as Main Switch
General Switchboard / Distribution Board labelling	
<input type="checkbox"/>	General Switchboard / Distribution Board labelling Correct
<input type="checkbox"/>	FSC labelling not provided
<input type="checkbox"/>	Incorrect Labelling of circuits provided (i.e Range labelled as HWS)
Switchboard wiring / F.S.C. cables & connections	
<input type="checkbox"/>	Switchboard Wiring / F.S.C. Cables & Connections Correct
<input type="checkbox"/>	No FSC neutrals wired
<input type="checkbox"/>	No FSC earths wired
<input type="checkbox"/>	Incorrect Neutral sequencing
<input type="checkbox"/>	Incorrect wiring of the protected neutral bar
<input type="checkbox"/>	Daisy chaining undersize cable across RCDs - MCBs
<input type="checkbox"/>	Incorrect colour of FSC earths / Neutrals
<input type="checkbox"/>	Incorrect table used for cable selection
<input type="checkbox"/>	Incorrect cable size for FSC / Switchboard wiring
<input type="checkbox"/>	RCD/s not wired to operate - Incorrectly wired
<input type="checkbox"/>	MEN situation created at Distribution Switchboard
<input type="checkbox"/>	All connections / screws done up to at least finger tight
<input type="checkbox"/>	Other faults identified by assessor
<input type="checkbox"/>	<u>Details:</u>
Final Sub Circuits protection	
<input type="checkbox"/>	Final Sub Circuits Protection Correct
<input type="checkbox"/>	No Overload protection of the FSC
<input type="checkbox"/>	Incorrect FSC overload protection
Access to live parts	
<input type="checkbox"/>	No Access To Live Parts
<input type="checkbox"/>	Escutcheon Plate missing / Distribution Board cover not securely closed
<input type="checkbox"/>	Pole fillers missing adjacent to live conductors / components
<input type="checkbox"/>	Neutral link cover not installed securely
<input type="checkbox"/>	Meter Panel not securely closed
<input type="checkbox"/>	Service fuse wedge/s not inserted
<input type="checkbox"/>	3 phase load cover not installed securely
<input type="checkbox"/>	FOLCB cover not securely fixed in place
Incorrect selection of components	
<input type="checkbox"/>	Selection of Components Correct
<input type="checkbox"/>	Incorrect RCD type selected
<input type="checkbox"/>	<u>Details:</u>
General	
Extra components / circuit supplied and / or omitted	
<input type="checkbox"/>	Components / Circuits Supplied Correctly
<input type="checkbox"/>	Distribution board isolator not provided

Extra circuit provided that was not ask for
Using an RCD/MCB combo PLUS MCBs
Circuits Omitted
Unsafe defect not listed above
Details.....

Total marks LOST for question 1

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Total marks awarded for question 1

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Q2 Relates to Testing an Installation (32 marks)

Q2.1 Resistance of the Main Earthing Conductor and Bonding Conductors (2 marks)

Main Earthing Conductor (1 mark)

	Main Earth conductor - Correct Reading and result
	Main Earth conductor - Correct Reading with result incorrect
	Main Earth conductor - Correct Reading with no or incorrect units
	Main Earth Conductor - Incorrect reading
	Main Earth conductor - Not attempted
	MARKS AWARDED

Bonding Conductor to water pipe (1 mark)

	Bonding conductor - Correct Reading and result
	Bonding conductor - Correct Reading with result incorrect
	Bonding conductor - Correct Reading with no or incorrect units
	Bonding Conductor - Incorrect reading
	Bonding conductor - Not attempted
	MARKS AWARDED

Q2.2 Insulation Resistance of Wiring (10 marks)

Whole Installation (2 marks)

	Whole Installation - Correct Reading and Result
	Whole Installation - Correct Reading with result incorrect or not given.
	Whole Installation - Correct Reading with no or incorrect units
	Whole Installation - Incorrect reading
	Whole Installation - Not attempted
	MARKS AWARDED

Subcircuit No.1 (2 marks)

	Subcircuit No.1 - Correct Reading and Result
	Subcircuit No.1 - Correct Reading with result incorrect or not given.
	Subcircuit No.1 - Correct Reading with no or incorrect units
	Subcircuit No.1 - Incorrect reading
	Subcircuit No.1 - Not attempted
	MARKS AWARDED

Subcircuit No.2 (2 marks)

	Subcircuit No.2 - Correct Reading and Result
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	Subcircuit No.2 - Correct Reading with result incorrect or or not given.
	Subcircuit No.2 - Correct Reading with no or incorrect units
	Subcircuit No.2 - Incorrect reading
	Subcircuit No.2 - Not attempted
	MARKS AWARDED

Subcircuit No.3 (2 marks)

	Subcircuit No.3 - Correct Reading and Result
	Subcircuit No.3 - Correct Reading with result incorrect or not given.
	Subcircuit No.3 - Correct Reading with no or incorrect units
	Subcircuit No.3 - Incorrect reading
	Subcircuit No.3 - Not attempted
	MARKS AWARDED

Subcircuit No.4 (2 marks)

	Subcircuit No.4 - Correct Reading and Result
	Subcircuit No.4 - Correct Reading with result incorrect or not given.
	Subcircuit No.4 - Correct Reading with no or incorrect units
	Subcircuit No.4 - Incorrect reading
	Subcircuit No.4 - Not attempted
	MARKS AWARDED

Q2.3 Earthing & Insulation Resistance of Appliance (3 marks)

Earthing of the appliance (1 marks)

	Earthing of Exposed Metal - Correct Reading and Result
	Earthing of Exposed Metal - Correct Reading with result incorrect
	Earthing of Exposed Metal - Correct Reading with no or incorrect units
	Earthing of Exposed Metal - Incorrect reading
	Earthing of Exposed Metal - Not attempted
	MARKS AWARDED

Insulation Resistance of Appliance (2 marks)

	Insulation Resistance - Correct Reading and Result
	Insulation Resistance - Correct Reading with result incorrect
	Insulation Resistance - Correct Reading with no or incorrect units
	Insulation Resistance - Incorrect reading
	Insulation Resistance - Not attempted
	MARKS AWARDED

Q2.4 Resistance of Protective Earthing Conductors (4 marks)

Socket Outlet No.1 (1 mark)

	Socket Outlet No. 1 - Correct Reading and Result
	Socket Outlet No. 1 - Correct Reading with result incorrect
	Socket Outlet No. 1 - Correct Reading with no or incorrect units with the correct result.
	Socket Outlet No. 1 - Incorrect reading
	Socket Outlet No. 1 - Not attempted
	MARKS AWARDED

Socket Outlet No. 2 (1 mark)

	Socket Outlet No. 2 - Correct Reading and Result
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	Socket Outlet No. 2 - Correct Reading with result incorrect
	Socket Outlet No. 2 - Correct Reading with no or incorrect units with the correct result.
	Socket Outlet No. 2 - Incorrect reading
	Socket Outlet No. 2 - Not attempted
	MARKS AWARDED

Fluorescent Luminaire (1 mark)

	Fluorescent Luminaire - Correct Reading and Result
	Fluorescent Luminaire - Correct Reading with result incorrect
	Fluorescent Luminaire - Correct Reading with no or incorrect units with the correct result.
	Fluorescent Luminaire - Incorrect reading
	Fluorescent Luminaire - Not attempted
	MARKS AWARDED

Appliance Socket Outlet (1 mark)

	Appliance Socket Outlet - Correct Reading and Result
	Appliance Socket Outlet - Correct Reading with result incorrect
	Appliance Socket Outlet - Correct Reading with no or incorrect units with the correct result.
	Appliance Socket Outlet - Incorrect reading
	Appliance Socket Outlet - Not attempted
	MARKS AWARDED

Q2.5 Polarity Test - Consumers Mains (2 marks)

Consumers Mains ACTIVE (1 mark)

	Active - Correct Reading and Result
	Active - Correct Reading with result incorrect
	Active - Correct Reading with no or incorrect units
	Active - Incorrect reading
	Active - Not attempted
	MARKS AWARDED

Consumers Mains Neutral (1 mark)

	Neutral - Correct Reading and Result
	Neutral - Correct Reading with result incorrect
	Neutral - Correct Reading with no or incorrect units
	Neutral - Incorrect reading
	Neutral - Not attempted
	MARKS AWARDED

Q2.6 Polarity Test - Operation of Switches (5 marks)

Ceiling Rose (1 mark)

	Ceiling Rose - Correct response given with the correct result.
	Ceiling Rose - Correct response given with an incorrect result
	Ceiling Rose - Incorrect response given.
	Ceiling Rose - Not attempted
	MARKS AWARDED

Fluorescent Luminaire (1 mark)

	Fluorescent Luminaire - Correct response given with the correct result.
	Fluorescent Luminaire - Correct response given with an incorrect result
	Fluorescent Luminaire - Incorrect response given.
	Fluorescent Luminaire - Not attempted

MARKS AWARDED

Socket Outlet No. 1 (1 marks)

- Socket Outlet No. 1 - Correct response given with the correct result.
- Socket Outlet No. 1 - Correct response given with an incorrect result
- Socket Outlet No. 1 - Incorrect response given.
- Socket Outlet No. 1 - Not attempted
- MARKS AWARDED

Socket Outlet No. 2 (1 mark)

- Socket Outlet No. 2 - Correct response given with the correct result.
- Socket Outlet No. 2 - Correct response given with an incorrect result.
- Socket Outlet No. 2 - Incorrect response given.
- Socket Outlet No. 2 - Not attempted
- MARKS AWARDED

Socket Outlet FAN (1 mark)

- Socket Outlet Fan - Correct response given with the correct result.
- Socket Outlet Fan - Correct response given with an incorrect result
- Socket Outlet Fan - Incorrect response given.
- Socket Outlet Fan - Not attempted.
- MARKS AWARDED

Q2.7 Fault Loop Impedance (2 marks)

Appliance socket outlet

- Appliance Socket Outlet - All parts correct
- Appliance Socket Outlet - Correct Measured and T 8.2 values with incorrect result.
- Appliance Socket Outlet - Correct Measured value with incorrect T 8.2 value therefore incorrect result.
- Appliance Socket Outlet - Incorrect Measured Value
- Appliance Socket Outlet - Incorrect Protective device rating.
- Appliance Socket Outlet - Values have no or incorrect units given.
- Appliance Socket Outlet - Not attempted
- MARKS AWARDED

Q2.8 RCD Testing (4 marks)

- RCD 1 reading correct - time / trip current
- RCD 1 reading incorrect - time / trip current
- RCD 2 reading correct - time / trip current
- RCD 2 reading incorrect - time / trip current
- RCD 3 reading correct - time / trip current
- RCD 3 reading incorrect - time / trip current
- Wiring rule correct
- Wiring rule incorrect
- MARKS AWARDED

Q3 MEN System Voltage Measurements

3.1 Measured Values (8 marks)

	All parts correct
	No supply voltage measured or incorrect
	Test Condition 1 All readings correct
	Test Condition 1 All readings incorrect
	Test Condition 1 Appliance Frame reading correct
	Test Condition 1 Appliance Frame reading incorrect
	Test Condition 1 Appliance terminal reading correct
	Test Condition 1 Appliance terminal reading incorrect
	Test Condition 1 Water Pipe reading correct
	Test Condition 1 Water Pipe reading incorrect
	Test Condition 2 All readings correct
	Test Condition 2 All readings incorrect
	Test Condition 2 Appliance Frame reading correct
	Test Condition 2 Appliance Frame reading incorrect
	Test Condition 2 Appliance terminal reading correct
	Test Condition 2 Appliance terminal reading incorrect
	Test Condition 2 Water Pipe reading correct
	Test Condition 2 Water Pipe reading incorrect
	Test Condition 3 All readings correct
	Test Condition 3 All readings incorrect
	Test Condition 3 Appliance Frame reading correct
	Test Condition 3 Appliance Frame reading incorrect
	Test Condition 3 Appliance terminal reading correct
	Test Condition 3 Appliance terminal reading incorrect
	Test Condition 3 Water Pipe reading correct
	Test Condition 3 Water Pipe reading incorrect
	Test Condition 4 All readings correct
	Test Condition 4 All readings incorrect
	Test Condition 4 Appliance Frame reading correct
	Test Condition 4 Appliance Frame reading incorrect
	Test Condition 4 Appliance terminal reading correct
	Test Condition 4 Appliance terminal reading incorrect
	Test Condition 4 Water Pipe reading correct
	Test Condition 4 Water Pipe reading incorrect
	All the APPLIANCE FRAME readings incorrect
	All the WATER PIPE readings incorrect
	All the APPLIANCE TERMINAL readings incorrect
	No units or incorrect units given
	Question not attempted
	MARKS AWARDED

3.2 MEN explanation (10 marks)

	Your explanation of the Voltage readings covers all aspects of the question
	No mention of what the fault could be and where the fault occurs?
	No explanation of the MEN system.
	Your explanation does not fully explain your voltage readings.
	In your explanation you write that voltage flows in the circuit instead of current flow.

	Current flow diagram not completed or incorrect
	No explanation of the safety of the installation
	Question not attempted
	Other
	MARKS AWARDED

Q4 Visual Defects (15 marks)

Defect 1 (3 marks)

	Correct defect and Wiring Rules Clause No.
	Correct defect with Wiring Rules Clause/Table Number incorrect or not provided
	Correct defect with Wiring Rules Clause/Table Number incomplete
	Incorrect defect with correct Wiring Rules Clause/Table Number
	Incorrect defect with incorrect Wiring Rules Clause/Table Number
	Question not attempted
	MARKS AWARDED

Defect 2 (3 marks)

	Correct defect and Wiring Rules Clause No.
	Correct defect with Wiring Rules Clause/Table Number incorrect or not provided
	Correct defect with Wiring Rules Clause/Table Number incomplete
	Incorrect defect with correct Wiring Rules Clause/Table Number
	Incorrect defect with incorrect Wiring Rules Clause/Table Number
	Question not attempted
	MARKS AWARDED

Defect 3 (3 marks)

	Correct defect and Wiring Rules Clause No.
	Correct defect with Wiring Rules Clause/Table Number incorrect or not provided
	Correct defect with Wiring Rules Clause/Table Number incomplete
	Incorrect defect with correct Wiring Rules Clause/Table Number
	Incorrect defect with incorrect Wiring Rules Clause/Table Number
	Question not attempted
	MARKS AWARDED

Defect 4 (3 marks)

	Correct defect and Wiring Rules Clause No.
	Correct defect with Wiring Rules Clause/Table Number incorrect or not provided
	Correct defect with Wiring Rules Clause/Table Number incomplete
	Incorrect defect with correct Wiring Rules Clause/Table Number
	Incorrect defect with incorrect Wiring Rules Clause/Table Number
	Question not attempted
	MARKS AWARDED

Defect 5 (3 marks)

	Correct defect and Wiring Rules Clause No.
	Correct defect with Wiring Rules Clause/Table Number incorrect or not provided
	Correct defect with Wiring Rules Clause/Table Number incomplete
	Incorrect defect with correct Wiring Rules Clause/Table Number
	Incorrect defect with incorrect Wiring Rules Clause/Table Number
	Question not attempted
	MARKS AWARDED