

International Vocational Training for Future Electricians

EXAMPLE OF AN INITIAL PRACTICAL TEST

PROJECT: LLP-LdV/IVT/2011/RO/048

STUDENTS' SHEET - INITIAL PRACTICAL TEST

PARTICIPANTS' NAME AND SURNAME

Tasks:

- (10p) Identify the components of electrical installation: *fuses, breakers, switches, boxes, conductors, energy meter, lamps*
- (20p) Identify the defects in a simple lighting installation by visual inspection
 - Poor connections and faults of connections
 - Defects of the insulation.....
- (20p) Choose the right Measurement and Control Devices and note the characteristics of measurement and control devices in the table below: names, attributes, uses

Nr.	Name	Attributes	Uses
1	<i>Ohmmeter</i>		
2	<i>Ammeter</i>	<i>measures the intensity of the current</i>	<i>Measuring range 0-10A</i>
3	<i>Voltage device</i>	<i>for a.c. device for measuring the alternative current</i>	<i>Measuring range 0-600 a.c.</i>

- (20p) Use Measurement and Control Devices for measuring the electrical parameters of the installation:
 - The continuity
 - The measured current is.....
 - The measured voltage is *220V*
- (20p) Explain the data from measurements; analyze the data collected from measurements, interpret the data
 - Internal faults of the fuses. *interruptions*
 - Internal faults of the breakers. *bad contacts*
- (10p) Respect the rules of health and safety

Accompanying teacher:

Accompanying teacher:

Tutor:



PROJECT: LLP-LdV/VT/2011/RO/048

EVALUATION SHEET - INITIAL PRACTICAL TEST

Basic training field: electrical: ELECTRIC
General training area: ELECTRIC
Grade: the Xth - junior high school

PARTICIPANTS' NAME AND SURNAME

FINAL MARK *6.3 points*

The tutor shows the participant:

- a simple installation of lighting which is faulty;
- the Measurement and Control Devices he needs to use.

The participant identifies the defects in a simple lighting installation by visual inspection, checking with measurement devices (analyzing the data collected from measurements, interpreting the data).

TOTAL: 100 points

Nr.	Objective to be achieved	Maximum score	Score achieved
1)	Identifies components of electrical installation	10	<i>10</i>
2)	Detects visual defects: - Poor connections and faults of connections - defects of the insulation	20	<i>—</i>
3)	Chooses the right Measurement and Control Devices - names, attributes, use	20	<i>16</i>
4)	Uses Measurement and Control Devices for measuring the electrical parameters of the installation: -measuring the continuity -measuring the current, voltage	20	<i>7</i>
5)	Explains the data from measurements -faults of the fuses -faults of the breakers	20	<i>20</i>
6)	Respects the rules of health and safety	10	<i>10</i>
	Total	100	

Accompanying teacher:

Accompanying teacher:

Tutor:

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**EXAMPLES OF WEEKLY
EVALUATION (2 WEEKS)**



PROJECT: LLP-LdV/IVT/2011/RO/048

WEEKLY EVALUATION SHEET - PRACTICAL TEST
WEEK 1

Basic training field: electrical: ELECTRIC
General training area: ELECTRIC
Grade: the Xth - junior high school

PARTICIPANTS' NAME AND SURNAME

FINAL MARK *70 points*

Answer T (True) or F (False):

TOTAL: 100 points

In a lighting installation and sockets:

Statement / Enunt	T/F	Score
1. The light circuits are distinct from the plug circuits Circuite de lumină vor fi distincte față de circuitele de priză	F	-
2. The protective conductor is blue Conductorul de protecție are culoarea albastră	F	10
3. Without voltage circuits are checked with the ohmmeter Circuitele fără tensiune sunt verificate cu ohmetrul	T	10
4. On a single phase socket circuit, there will be installed no more than 2 sockets Pe un circuit de prize monofazat se vor instala cel mult 2 prize.	F	10
5. The phase conductor can be red Conductorul de faza poate avea culoarea rosie	T	10
6. The socket contacts are permanently under power supply Contactele prizelor sunt permanent sub tensiune	F	-
7. The connections between conductors in doses require clamps Legaturile dintre conductoare in dozele de derivatie necesita cleme.	F	10
8. For supplying a lighting with 4 lamps, we use one switch. Pentru alimentarea unui corp de iluminat cu 4 lămpi se folosește un întrerupător	F	10
9. The thermic relays protect against overload Releele termice protejeaza la suprasarcina	T	10
10. The fuses protect against overload Sigurantele fuzibile protejeaza la suprasarcina	T	-

Accompanying teacher:

Accompanying teacher:

Tutor:

PROJECT: LLP-LdV/IVT/2011/RO/048

**CORRECTION AND GRADING SCALE - PRACTICAL TEST
WEEK 1**

TOTAL: 100 points

Statement / Enunt	T/F	Score
1.The light circuits are distinct from the plug circuits Circuite de lumină vor fi distincte față de circuitele circuite de priză	T	10
2. The protective conductor is blue Conductorul de protecție are culoarea albastră	F	10
3. Without voltage circuits are checked with the ohmmeter Circuitele fără tensiune sunt verificate cu ohmetrul	T	10
4.On a single phase socket circuit, there will be installed no more than 2 sockets Pe un circuit de prize monofazat se vor instala cel mult 2 prize.	F	10
5. The phase conductor can be red Conductorul de faza poate avea culoarea rosie.	T	10
6.The socket contacts are permanently under power supply Contactele prizelor sunt permanent sub tensiune	T	10
7.The connections between conductors in doses require clamps Legaturile dintre conductoare in dozele de derivatie necesita cleme.	F	10
8.For supplying a lighting with 4 lamps, we use one switch. Pentru alimentarea unui corp de iluminat cu 4 lămpi se folosește un întrerupător	F	10
9.The thermic relays protect against overload Releele termice protejeaza la suprasarcina	T	10
10.The fuses protect against overload Sigurantele fuzibile protejeaza la suprasarcina	F	10

Accompanying teacher:

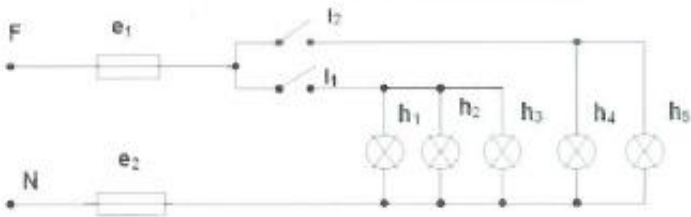
Accompanying teacher:

Tutor:

PROJECT: LLP-LdV/IVT/2011/RO/048

**CORRECTION AND GRADING SCALE - PRACTICAL TEST
WEEK 2**

TOTAL: 100 points

Nr	Max.	Requirement	Answer
1	40p	The wiring diagram	<p style="text-align: center;">INSTALAȚIE DE CANDELABRU</p> 
2	20p	Nr. of doses	2
3	10p	Type of wire	Neutral wire
4	10p	Wire connections inside the protection tube	No
5	20p	Parameters	Installed power; Nominal current
	100	Total	

Accompanying teacher:

Accompanying teacher:

Tutor:



PROJECT: LLP-LdV/IVT/2011/RO/048

WEEKLY EVALUATION SHEET - PRACTICAL TEST
WEEK 2

Basic training field: electrical: ELECTRIC
General training area: ELECTRIC
Grade: the Xth - junior high school

PARTICIPANTS' NAME AND SURNAME

FINAL MARK *85 points*

Tasks:

- (40p) Develop a wiring diagram of a lighting installation composed of two fuses connected to the power supply network, a luminaire with 5 incandescent bulbs and a double switch
- (20p) Specify the number of doses required in circuit
- (10p) Specify the type of wire that goes directly to the luminaire
- (10p) Answer whether inside the protection tubes there are wire connections
- (20p) Specify the parameters according to which the fuses are chosen

TOTAL: 100 points

Nr	Requirement	Answer	Score
1	The wiring diagram		40
2	Nr. of doses	2	20
3	Type of wire	Neutral wire	10
4	Wire connections	No	10
5	Parameters	Current	5

Accompanying teacher:

Accompanying teacher:

Tutor:

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EXAMPLE OF A FINAL PRACTICAL TEST



PROJECT: LLP-LdV/IVT/2011/RO/048

EVALUATION SHEET - FINAL PRACTICAL TEST

Basic training field: electrical: ELECTRIC
General training area: ELECTRIC
Grade: the Xth - junior high school

PARTICIPANTS' NAME AND SURNAME
FINAL MARK ...100... points

The participant carries out a lighting installation set apparently on a panoply and composed of an electric control panel, a socket, a single-pole breaker and a lighting with light-bulb.

TOTAL: 100 points

Nr.	Objective to be achieved	Maximum score	Score achieved
1)	Chooses the materials	10	10
2)	Equips the electric panel with automatic fuses	10	10
3)	Connects the wires to terminals of socket and breaker, and sets the apparatus in doses	20	20
4)	Carries out the electrical connections of the socket, breaker and electric panel	10	10
5)	Sets the lighting fitting in the socket of the panoply	10	10
6)	Checks the continuity of the connections with digital ohmmeter	10	10
7)	Connects the installation to the power supply	10	10
8)	Checks the running of the lighting fitting and the power supply at the sockets	10	10
9)	Respects the rules of health and safety	10	10
	Total	100	

Accompanying teacher

Accompanying teacher

Tutor:

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STUDENTS' SHEET - FINAL PRACTICAL TEST

PARTICIPANTS' NAME AND SURNAME

Tasks:

TOTAL: 100 points

Carry out a lighting installation set apparently on a panoply and composed of an electric control panel, a socket, a single-pole breaker and a lighting with light-bulb, using the electric scheme from below and following the steps:

1.(10p) Choose the materials / apparatus. Specify the characteristics of apparatus:

Type of the breaker *Singles*

Parameters of the breaker *Nominal current, Nominal Voltage*

Power of the lighting /luminaire *20W*

Type of the socket *Double, grounded*

2.10p) Equip the electric panel with automatic fuse;

Types of fuses: *25A*

3.(20p) Connect the wires to terminals of socket and breaker, and sets the apparatus in doses;

The required tools are: *screwdrivers, claw*

4.(10p) Carry out the electrical connections of the socket, breaker and electric panel;

5.(10p) Set the lighting fitting in the socket of the panoply

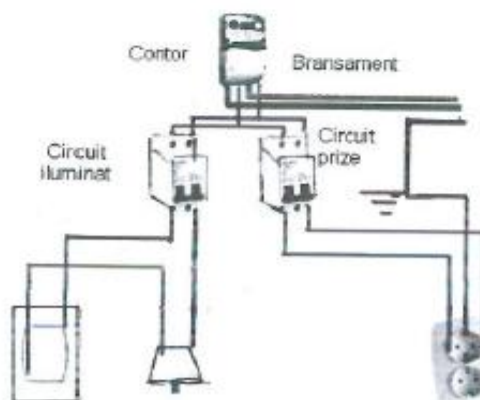
6.(10p) Check the continuity of the connections with digital ohmmeter;

What are the points of checking? *doses*

7.10p) Connect the installation to the power supply

8.(10p) Check the running of the lighting and the power supply at the sockets.

9.(10p) Respect the rules of health and safety



Accompanying teacher

Accompanying teacher

Tutor: