Residential Wiring										
I. Define and apply safety rules and practices in residential wiring according	j to l	NEC	star	ndar	ds.					
Tasks Instructions:										
Each number to the right refers to a single student/candidate (1-10). Place a										
check (√) in the respective column for the appropriate student / candidate										
number (1-10) if the skills listed below are observed as stated. Leave blank if	1	2	3	4	5	6	7	8	9	10
not observed. Student/candidate will only get credit for the skills they have										
demonstrated.										
Apply shop rules and regulations to work stations.										
List the techniques and practices used to prevent fires										
Use electrical and hand tools correctly										
Discuss the appropriate methods for lifting and climbing ladders										
Explain appropriate clothing for residential wiring										
Outline the safety requirements for installing temporary electrical services										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (8)										
	I					I	I			
II. Apply knowledge of basic wiring theory according to NEC standards.										
Tasks Instructions:										
	1	2	3	4	5	6	7	8	9	10
Use wiring diagrams, schematic diagrams and prints successfully in a										
scenario										

Apply math calculations to circuits and measurements										
Discuss theory concepts for troubleshooting										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (5)										
	·			I		I				
III. Discuss important trade information and standards according to the Ni	EC.									
Tasks Instructions:										
	1			1		1				
	1	2	3	4	5	6	7	8	9	10
Explain the purpose and use of the										
National Electric Code										
Sketch and diagram effectively										
Plan the layout of an electrical installation										
Use trade catalogs and publications to										
solve residential wiring problems										
Correlate specifications, prints and job										
sites										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (7)										
	•	•	•	•	•	•	•	•		
IV. Use basic equipment and procedures defined by industry standards.										
Tasks Instructions:										

	1	2	3	4	5	6	7	8	9	10
Discuss techniques of residential and light commercial wiring										
Demonstrate wire-pulling techniques										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (4)										
V. Apply knowledge of service loads and electrical safety to residential wiri	ng si	tuat	ions	•						
Tasks Instructions:										
	1		1	1		1				T
	1	2	3	4	5	6	7	8	9	10
Compute service loads										
Calculate individual service loads										
Determine the number of outlets permitted in a circuit										
Compute the size of service entrance conductors										
Use all types of cables including NM, MC and service										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (7)										
VI. Install a service entrance to meet NEC standards.										
Tasks Instructions:										
	1	2	3	4	5	6	7	8	9	10

Install a main service panel										
Install circuit breakers in a panel										
Install a service entrance cable to service drop										
Install temporary electrical service										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (6)										
		I	I	ı	ı	I				
VII. Install switch boxes and outlet boxes to meet NEC standards.										
Tasks Instructions:										
	1	2	3	4	5	6	7	8	9	10
	'	_	3	4	3	0	'	0	9	10
Install box hangers										
Install recess boxes for outlets										
Install hangable boxes										
Install octagon boxes										
Install surface mount boxes										
Install recessed fixture housing in a ceiling										
Install outlet boxes in dry wall, lath plaster or paneled walls										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (9)										
		ı	ı	I	I	I				
VIII. Maintain already existing wiring to meet NEC standards.										
Tasks Instructions:										

	1	2	3	4	5	6	7	8	9	10
Diagnose and repair incandescent lights										
Replace existing receptacles and switches										
Troubleshoot a branch circuit										
Test wiring for correct voltages										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (6)										
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IX. Rough in, connect and install electrical devices to meet NEC standards.										
Tasks Instructions:										
Tasks Instructions:										
Tasks Instructions:										
Tasks Instructions:	1	2	3	4	5	6	7	8	9	10
Tasks Instructions: Rough in, connect and install a single pole switch	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch Rough in, connect and install a four-way switch	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch Rough in, connect and install a four-way switch Rough in, connect and install a duplex grounded receptacle	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch Rough in, connect and install a four-way switch Rough in, connect and install a duplex grounded receptacle Rough in, connect and install a 120–240 volt distribution panel	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch Rough in, connect and install a four-way switch Rough in, connect and install a duplex grounded receptacle Rough in, connect and install a 120–240 volt distribution panel Rough in, connect and install a door chime system	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch Rough in, connect and install a four-way switch Rough in, connect and install a duplex grounded receptacle Rough in, connect and install a 120–240 volt distribution panel Rough in, connect and install a door chime system Rough in, connect and install a ground fault interrupting device	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch Rough in, connect and install a four-way switch Rough in, connect and install a duplex grounded receptacle Rough in, connect and install a 120–240 volt distribution panel Rough in, connect and install a door chime system Rough in, connect and install a ground fault interrupting device Rough in, connect and install an emergency warning system	1	2	3	4	5	6	7	8	9	10
Rough in, connect and install a single pole switch Rough in, connect and install a three-way switch Rough in, connect and install a four-way switch Rough in, connect and install a duplex grounded receptacle Rough in, connect and install a 120–240 volt distribution panel Rough in, connect and install a door chime system Rough in, connect and install a ground fault interrupting device Rough in, connect and install an emergency warning system Rough in, connect and install a photoelectric cell control	1	2	3	4	5	6	7	8	9	10

Rough in, connect and install lighting dimmers										
Rough in, connect and install TV outlets										
Rough in, connect and install telephone outlets										
Rough in, connect and install emergency lighting systems										
Rough in, connect and install appliance circuits										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (18)										
		•								
X. Install PVC and EMT conduit to meet NEC standards.										
Tasks Instructions:										
	1	2	3	1	5	6	7	Ω	a	10
	1	2	3	4	5	6	7	8	9	10
Make 90-degree bends from measurements	1	2	3	4	5	6	7	8	9	10
Make 90-degree bends from measurements Make offset bends from measurements	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements Safety and infection control are adhered to during all aspects of this task.	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements Safety and infection control are adhered to during all aspects of this task. The student completed task within the time limited.	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements Safety and infection control are adhered to during all aspects of this task. The student completed task within the time limited. Points earned	1	2	3	4	5	6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements Safety and infection control are adhered to during all aspects of this task. The student completed task within the time limited. Points earned						6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements Safety and infection control are adhered to during all aspects of this task. The student completed task within the time limited. Points earned Total possible points (7)						6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements Safety and infection control are adhered to during all aspects of this task. The student completed task within the time limited. Points earned Total possible points (7) XI. Install residential telecommunications infrastructure to meet current TIA						6	7	8	9	10
Make offset bends from measurements Make back-to-back bends from measurements Make saddle bends from measurements Determine correct conduit measurements Safety and infection control are adhered to during all aspects of this task. The student completed task within the time limited. Points earned Total possible points (7) XI. Install residential telecommunications infrastructure to meet current TIA						6	7	8	9	10

	1	2	3	4	5	6	7	8	9	10
Install a coaxial cable with "F" type connectors and terminating hardware										
Install unshielded twisted-pair cable, connectors and terminating hardware										
Install 110-type terminating hardware										
Safety and infection control are adhered to during all aspects of this task.										
The student completed task within the time limited.										
Points earned										
Total possible points (5)										
Total points earned for all sections (A)										
Total possible points for all sections (B) 82										
Student/candidate score (divide A/B)										